



Georgia Southern University  
**Digital Commons@Georgia Southern**

---

Electronic Theses and Dissertations

Graduate Studies, Jack N. Averitt College of

---

Fall 2010

# Perceptions of Middle School Teachers Regarding the Use of Standardized Testing Data

Darrell LaMar Stephens

Follow this and additional works at: <https://digitalcommons.georgiasouthern.edu/etd>

---

## Recommended Citation

Stephens, Darrell LaMar, "Perceptions of Middle School Teachers Regarding the Use of Standardized Testing Data" (2010). *Electronic Theses and Dissertations*. 370.  
<https://digitalcommons.georgiasouthern.edu/etd/370>

This dissertation (open access) is brought to you for free and open access by the Graduate Studies, Jack N. Averitt College of at Digital Commons@Georgia Southern. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact [digitalcommons@georgiasouthern.edu](mailto:digitalcommons@georgiasouthern.edu).

PERCEPTIONS OF MIDDLE SCHOOL TEACHERS REGARDING THE USE  
OF STANDARDIZED TESTING DATA

by

DARRELL LAMAR STEPHENS

(Under the Direction of Linda M. Arthur)

ABSTRACT

Principals and teachers are under continuous pressure to improve student learning. The ability to analyze standardized testing data provides a tool for educators to use in their effort to combat students' deficiency in learning. The researcher conducted the study in four middle schools in a Georgia school district located outside of metropolitan Atlanta, which is in the beginning stages of providing training to teachers, and administrators on how to use standardized test results to improve student learning. To accomplish the purpose of this study, the researcher analyzed the surveyed responses of 242 participants, all middle school teachers. The method for this quantitative research study used descriptive statistics and independent sample t-tests.

Findings of the study converged with the literature in terms of the purpose and benefits of using standardized testing data. Teachers agreed that principals provided time for them to analyze and plan instruction based on standardized testing results. Teachers also reported that their principals' current leadership actions was conducive to them being able to use standardized test data more, and they believed that there is an expectation in their school for teachers to use standardized testing data to inform their practice.

INDEX WORDS: Standardized state criterion testing data, Georgia Criterion Competency Test (Ga.CRCT), No Child Left Behind (NCLB), High-Stakes Tests, Georgia Performance Standards (GPS)

PERCEPTIONS OF MIDDLE SCHOOL TEACHERS REGARDING THE USE OF  
STANDARDIZED TESTING DATA

by

DARRELL LAMAR STEPEHENS

Associates in Science, Midlands Technical College, 1994

Bachelor of Science, Mathematics Education, Clemson University, 1997

Masters of School Administration, University of North Carolina, Charlotte, 2002

Educational Specialist Degree, Georgia College & State University, 2007

A Dissertation Submitted to the Graduate Faculty of Georgia Southern University in Partial  
Fulfillment of the Requirements for the Degree

DOCTOR OF EDUCATION

STATESBORO, GEORGIA

December 2010

© 2010

Darrell L. Stephens

All Rights Reserved

PERCEPTIONS OF MIDDLE SCHOOL TEACHERS REGARDING THE USE OF  
STANDARDIZED TESTING DATA

by

DARRELL LAMAR STEPHENS

Major Professor: Linda M. Arthur

Committee: Barbara Mallory  
Dawn Tysinger

Electronic Version Approved:  
December 2010

## DEDICATION

This dissertation is dedicated to my mother, Thelma B. Amaker, whom as a single parent raised five children during the 1960's and retired from a career she enjoyed. You are my example of how one defines a "superwoman." I will never forget what you instilled in me to survive hard times that come in all shapes and forms. Your presence is truly missed as I try to contend with not having you physically, but spiritually, in my life. Mom, you are my hero, and I love you and miss you dearly. To my Kimme (wife), thank you for your understanding what this journey required. You are a woman with unwavering support, one who is God fearing, strong, and as patient as one can be with a husband like me. You have made me a better person, man, father, and taught me how to care and love tenderly. I will be forever grateful, for having you in my life. You are my heart, and I love you dearly, Nicole K. Stephens, MBA.

A deep expression of love to my 4 beautiful children, Brittany (BabyGirl), Nicolas (FatJack/Papa), the twins, Darnell (Smiley) & Darren (OldMan) allow this work to show you that through hard work, dedication, and a strong belief in the Lord, everything is possible. I will continue to impress upon all of you, my dear children, the importance of working up to your potential. To my precious grandbabies Liberty (Libby), and Dillynn you are very dear and very special to my heart. "G-pa" forever wants you to know that you have put joy in my spirit and into the true essence of my "being."

To my sisters Juanita, Janice, Renee (Vhelma) and my brother posthumously, Leon (Charles), your guidance, and support have been constant sources of inspiration and I want to say thanks for shaping my life and paving that road from "Lincolnshire" to

where I am at now. You have always been encouraging and proud of me for my accomplishments, and I love you and I thank God for each of you. Finally, to my father and mother-in-law, Mr. and Mrs. Clarence and Catherine Heard, I want to thank you for helping Kim and I along the way by providing hot meals, assisting with the boys, and too many other things that are too long to list. You all have served as great examples of commitment and what marriage means, and your 41 years of matrimony is a testimony to how you build and become one.

## ACKNOWLEDGMENTS

First, I would like to thank God for the desire, strength, and perseverance that he instilled in me and as I pursued my goals and dreams in this profession. I know that this accomplishment would not have been possible without Him in my life. Thank you God!

Special thanks to the four middle school principals and the 242 teachers who participated in this study. Your willingness to participant was truly a blessing. I wish you the best of luck in your administrative and teaching careers.

I offer my heartfelt gratitude to co-workers and friends for their assistance and guidance. Your support made it easier for me to endure during challenging times.

Lastly, I would like to sincerely thank the following professors for their time, direction, patience, and expertise:

Thanks Dr. Linda Arthur for serving as my committee chair. Your guidance and support were invaluable, and your enthusiasm was amazing.

Thanks to Dr. Barbara Mallory for continuing to push me beyond my limits. You were always helpful and provided me with valuable information to move forward in the process.

Thanks are also expressed to Dr. Dawn Tysinger for serving as my methodologist. I am grateful for your willingness to assist me. Your suggestions and warm spirit were appreciated. To Dr. Sylvia Nann Ingram Jordan, for her encouragement, and support of my doctoral studies, I realize that the measure of true leader are the offspring's they produce, I will do my best to represent you well.



## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS .....	7
LIST OF TABLES .....	8
CHAPTER	
1 INTRODUCTION .....	13
Background of the Study .....	15
Statement of the Problem .....	23
Research Questions .....	25
Significance of the Study .....	26
Research Procedures.....	27
Summary .....	28
2 REVIEW OF RESEARCH AND RELATED LITERATURE .....	30
Introduction .....	30
History of Testing.....	32
Pro's and Con's of Testing.....	39
Barriers .....	46
Principals' Role in Data Use .....	49
Methods That Make Meaningful Use of Data.....	53
Conclusion.....	57
3 METHODOLOGY .....	59
Introduction .....	59
Research Questions .....	60

	Research Design .....	60
	Population.....	61
	Sample and Participants .....	61
	Research Instrument .....	62
	Pilot Study .....	64
	Procedures .....	64
	Data Analysis .....	65
	Summary .....	68
4	REPORT OF DATA AND DATA ANALYSIS .....	70
	Introduction .....	70
	Analysis of Demographic Data .....	71
	Major Findings of the Study.....	94
5	SUMMARY, CONCLUSION, AND IMPLICATIONS .....	95
	Summary .....	95
	Purpose of Study .....	95
	Research Questions .....	96
	Summary of Major Findings .....	96
	Analysis and Discussion of Research Findings.....	97
	Conclusion.....	102
	Implications .....	105
	Recommendations for Further Study .....	106
	Concluding Thoughts .....	107

REFERENCES .....	109
APPENDICES .....	129
A TEACHERS' PERCEPTION SURVEY .....	130
B INSTITUTIONAL REVIEW BOARD APPROVAL LETTER .....	136
C PILOT STUDY INSTRUCTIONS .....	138

## LIST OF TABLES

	Page
Table 1: Teachers' Perception Reliability Coefficients .....	63
Table 2: The Return Rate of Questionnaires' by Schools.....	71
Table 3: Demographic Data on Subject Taught.....	72
Table 4: Demographic Data on Grade Taught .....	72
Table 5: Demographic Data on Years of Experience .....	73
Table 6: Group Statistics Data on "Belief" .....	74
Table 7: t-Test for Equality of Means for "Belief" .....	75
Table 8: Group Statistics Data on "Use" .....	77
Table 9: t-Test for Equality of Means for "Use" .....	78
Table 10: My Principal's Vision, Expectation, etc. for Using Data is Clear .....	80
Table 11: I Observe My Principal Using Standardized Criterion State Testing Data .....	81
Table 12: The Principal's Primary Focus was on Building Capacity for Data Use .....	82
Table 13: When Teachers Meet Formally To Discuss Data Results .....	83
Table 14: The Standardized State Criterion Tests Results I Receive Is Disaggregated ....	84
Table 15: There Is an Expectation in My School That Teachers Use .....	85
Table 16: I Have Been Trained On How to Use Standardized Test Data.....	86
Table 17: My Principal Provides Time for Staff To Analyze and Plan Based On Test Results.....	87
Table 18: The Leadership Staff Provides Encouragement to Help Me Use Test Data.....	88
Table 19: Test Data on My Current Students Is Easy To Access .....	89

Table 20: The Principal Provided Time for Teachers to Meet Based On The Results Of State Test.....	90
Table 21: The Principal Built Ownership by Making Sure Teachers Knew How to Use Data.....	91
Table 22: Staff developments focused on how to use standardized state testing data.....	92
Table 23: Individual Means and Standard Deviation in Response To.....	92

## Chapter I

### INTRODUCTION

“In God we trust; all others bring data” – (Deming, 1986, p. 12).

There have been many criticisms of educators in this era of high-stakes testing. Many politicians, local community leaders, and the public at large believe the scores on students' high-stakes tests are the only way to determine if teachers are doing their job (Bracey, 2001). However educators warned the public against using high-stakes tests, and the results they produce, to judge schools and teachers (Gabler, 1987). In their defense, educators revealed that they are over burdened by these tests and are “drowning” in the data produced by them (Celio & Harvey, 2005; Ingram, Louis, & Schroeder, 2004). Research in the profession revealed that 80% of educators in Georgia found more uses for teacher made test than state mandated high-stake tests (Steecher & Hamilton, 2006). However, teachers need high stakes tests to know what is important for students to learn and for them to teach (Amrein & Berliner, 2002). No longer in this profession can practitioners make decisions based on intuition, gut instinct, or fads (Slavin, 2002a, 2003b). Equity and accountability, as a result of the re-authorization of *The Elementary and Secondary Education Act (ESEA)*, known as *No Child Left Behind Act of 2001* (NCLB), have made it imperative that teachers base decisions on accurate and meaningful data that reflects student learning and achievement (Johnson, 2002; Lachat 2002). The law presumes that, by examining annual achievement data, educators can determine what causes unacceptable outcomes and can correct the unproductive parts of the system (Heibert et al., 2005).

When considering students' academic growth outcomes and how best to improve learning, one must think of the teacher, as research has shown that teachers have the most influence and effect on students' achievement (Darling-Hammond, 2000; Muijs & Reynolds, 2001; Nye et al., 2004; Robinson & Timperley, 2000). "The evidence is indisputable. Teaching had a 6 to 10 times as much impact on achievement as all other factors combined" (Schmoker, 2006, p.9). Sanders (1999) supports the assumption that teacher characteristics account for more variance in student achievement than any other scholastic input. Considering that teachers have such a profound influence on student achievement, it is imperative that school leaders have knowledge of how teachers are using standardized testing data (Center on Education Policy, 2004; The Information Edge, 2006). This knowledge is important as more resources are being invested in school systems to increase the use of student achievement data. The testing data are seen as tools to inform instruction in schools, especially in schools identified as needing improvement (Center on Education Policy, 2004; The Information Edge, 2006).

Despite the amount of standardized testing results available, many teachers still believe they are unqualified to analyze data appropriately to make sound instructional decisions (Choppin, 2002). Though it is critical for educators to believe in and use standardized testing results, researchers have yet to focus much attention on teachers' current impression of assessment data. The researcher surveyed teachers in Brewton County, Georgia, to determine their perceptions of standardized state criterion testing results. In this study "standardized state criterion testing" referred to all Georgia mandated tests for middle school students (e.g., Georgia Criterion Reference Competency Test (Ga.CRCT), Georgia Grade 8 Writing Assessment, and Assessing Comprehension and

Communication in English State to State for English Language Learners (ACCESS for ELLs). “Standardized state criterion testing results,” or “data,” or “assessment data” refers to the testing results teachers receive after students complete standardized state criterion tests.

### **Background of the Study**

Using standardized state criterion testing data has major implications in the field of education. Much of the standardized state criterion testing data is being used to track students for promotion, graduation, and leveling (Heubert & Hauser, 1999). Most of the research on what teachers should be doing with standardized test state criterion testing results has focused on how data can be used in the school improvement process (Bernhardt, 2003a; Choppin, 2002; Earl & Katz, 2002; Feldman, & Tung, 2001; Heritage & Chen, 2005). The research also shows that standardized tests results are being used to make performance appraisal decisions for teachers and principals, along with the creation of annual measurable objectives to hold schools and school systems accountable for the success of their students (Linn, 2000). However, there are few current studies in which researchers have examined what teachers do with standardized testing results. School leaders must be able to articulate specifically how teachers are using testing results as they work to increase learning in all children. A brief review of the literature provided (a) a historic perspective on the evolution of testing, (b) the pros and cons of testing, (c) perspectives on the barriers of using data, and (d) what the literature reveals about how principals influence the use of standardized test data in schools. Finally, (e) the review include suggested methods to help teachers collect, analyze, synthesize, and make meaningful use of data.



## **Historical Perspectives of Testing**

In the United States, during the mid-19th century, standardized test results were used to make comparisons among students and amongst schools systems. In 1840, an exam was designed in Boston; Massachusetts, that not only made comparisons among students and amongst schools systems, but it also monitored school's effectiveness (Resnick & Resnick, 1982), and it included many features of today's large-scale tests. In 1909, the Thorndike Handwriting Scale was the first popular standardized achievement test used in public schools (Perrone, 1991). A wide array of tests soon followed; nonetheless, it was not until 1923 that researchers began to think about how best to use results produced by standardized tests. They suggested, during this period, that teachers should use achievement tests as helpful tools for improving their work, and that, individual test results could be used to ascertain, which pupils in each class were in the greatest need of remedial teaching (Mort & Gats, 1923). Standardized testing programs began a substantial upward spiral after the 1950's and through the late 1960's. Even though the suggestions to teachers to use standardized testing data was first made during this era, the research on what teachers were doing with these results was sparse.

As the use of standardized testing continued to grow in the 1960's, researchers and testing authors continued looking at standardized tests, but they also continued strategizing on how best to use the results standardized tests produced (Mort & Gats, 1923). As they turned their attention to the testing results, they also focused attention on the teacher in the classroom. Testing authors were aware of the educational implications of the data provided by their testing instruments. An increasing emphasis was placed on using test data, not just for record collections of data (Mort & Gats, 1923). The manuals

for achievement tests advised administrators and teachers to use test results for reasons such as placement into academic learning groups, counseling groups, career education, and vocational plans (Wigdor & Garner, 1982). Standardized tests were already being used during this decade for diagnosing students with individual learning difficulties, for appraising, and for modifying instructional methods (Wigdor & Garner, 1982). Research revealed that some teachers had found uses for standardized testing results that were more substantial and that were of use to their practice than previously (Mort & Gats, 1923).

The accountability movement shifted in the late 1980's, and the 1990's saw the push in education from minimum competency to more rigorous standards, and for tests that would be aligned with those standards, helping to encourage teachers to teach those standards (Resnick & Resnick, 1992). However, with the birth of NCLB in 2001, not only were teachers being asked to teach to those standards, but also the standardized test and the results they produced became the indicator used to hold schools and school districts accountable for student achievement. In an empirical study conducted by Wohlstetter, Datnow, & Park (2008), it was concluded that the theory of action underlying NCLB requires that educators have the will and the know-how to analyze, interpret, and use data so that they can make informed decisions.

### **Benefits and Disadvantages of Testing**

The increase in testing that continued into the 2000's, as a result of NCLB, created several opinions that both supported and disfavored testing. Proponents believe that students and teachers need high-stakes tests to know what is important to learn and to teach respectively (Amrein & Berliner, 2002). Proponents of standardized testing

asserted that the theory of action implied by these accountability pressures of high-stakes testing would increase student achievement (Nichols, Glass, & Berliner, 2005).

Opponents countered that the pressure to show success on standardized tests was not allowing teachers to teach in-depth. Teachers were encouraged to use testing data to modify instruction, and also demonstrate communication to students on the purpose of the lesson (Tileston, 2009). However, teachers argued that high-stake tests narrow the curriculum and force teaching to the test (Nichols & Berliner, 2005). These particular tests also tended to provide results only offering a snapshot of student performance and most school districts did not link student achievement to teacher practices in such a way that educators could help determine what was working (Hess, 2009).

### **Barriers**

In a paramount demand for school improvement, many school districts were starting to look at how to use data, but the new emphasis on data necessitated knowledge and a skill set that was not taught regularly to most teachers (Englert, Fries, Martin, & Michael, 2005). This lack of understanding of how to use data created many barriers to data use. For instance, teachers often devalued standardized test data because they developed their own personal assessments for determining what children learned which had little to do with tests other than the those they created themselves (Ingram et al., 2004). Supovitz and Klein (2003) found that only 19% of the 68 administrators in the schools they surveyed believed that they had the skills to manipulate data to answer the questions in which they were interested. Additionally, timeliness in getting data back to be analyzed has greatly influenced individual use. If teachers feel as though they are not going to get the testing results back in enough time to prepare for proper instructional

planning, then future use of these standardized tests is less likely (Kerr, Marsh, Ikemoto, Darilek, & Barney, 2006).

A barrier to using standardized testing data is teachers' lack of belief in its validity (Herman & Gribbons, 2001). Several empirical studies offered strong evidence demonstrating that teachers did not believe in the validity and reliability of standardized assessments (Feldman & Tung, 2001; Herman & Gribbons, 2001; Ingram et al., 2004). They thought that tests had changed in quality from the first administration to the second or that students were not motivated to perform well on them.

Additional studies also revealed that teachers lack skill to veer from district-mandated curriculum guides, considering the pressures from their school district. Many teachers opted to follow the curriculum instead of the data because they believe that they are unprepared to use the data (Kerr et al., 2006). Teachers also often lack minimum understanding to create questions, select indicators, interpret results, and develop solutions when analyzing test data (Choppin, 2002; Feldman & Tung 2001; Mason, 2002).

Schools, particularly teachers, have been under constant scrutiny to increase the use of standardized test scores to guide instruction and curriculum (Henning, 2006). For example, test makers advised that by comparing student, classroom, or building scores with local and national norms, teachers can identify individual or group strengths and weaknesses for the purpose of adjusting the curriculum (Hoover et al., 2003). Data were also used for a variety of action decisions around instruction, curriculum, and professional development (Marsh, Pane, & Hamilton, 2006). However, most educators

are not trained to evaluate data and research or translate findings into practices that can improve student achievement (Dynarski, 2008).

### **Principals Role in Data Use**

Principals can be instrumental in not only helping teachers in translating data into practices that can improve learning, but they also can be influential in the use of test data by creating and implementing shared leadership roles by people, such as assistant principals, department chairs, counselors, and academic coaches. This implementation of shared leadership roles plays an important part in motivating teachers to use data (Copeland, 2003). Marzano (2003) discussed how a common misconception about leadership at the school level is that it should reside with a single individual that being the principal. The idea that an individual can affect change by will and personality is simply not supported by research studies. Georgia's Leadership Instruction for School Improvement (GLISI, 2008) believes that distributed leadership not only encourages, but also looks for others to take leadership responsibilities, regardless if they have formal leadership titles. This outlook on leadership is imperative because it advocates dispersing leadership throughout organizations rather than monopolizing it at the top, or in the case of the school, with the principal only. Each individual can lead by setting an example for others, regardless of what other skills he or she have or do not have for influencing people directly. The goal of distributed leadership is empowerment of all stakeholders. Hence, shared leadership can encourage teachers to use test data to guide the curriculum and instruction.

Principals influence on data use also includes allowing time for teachers to immerse themselves in daily inquiry into their classroom practice (Armstrong & Anthes,

2001); this immersion is important as teachers have shown enthusiasm for using standardized test data when it can provide useful information for their classroom practice (Symonds, 2003 ). In addition to shared leadership roles and allowing time for teachers to have dialogue about how best to use data, a principal's ability to communicate goals and have teachers commit to those goals has also proven to be very effective in influencing teachers use of data (Latham & Locke, 2006). A part of visionary leadership is articulating goals and winning commitment to such purposes like having teachers use data exhaustively in improving student learning (Hallinger & Heck, 2002). A study conducted by GLISI (2008) revealed that operant administrators used a data-driven approach to leadership based on collecting and synthesizing multiple sources of data. This approach guided decisions as it pertained to allocations of resources for instruction and curriculum and was deemed most appropriate to improving not only instruction and student achievement but also helped with assisting teachers from operating in isolation, particularly, when making decisions with standardized testing data.

Chrisman (2005) discovered that one of the ways that schools sustain success and influence the use of data by teachers is by principals making themselves available to teachers. This includes the principal's frequent attendance at grade level meetings and by teachers providing feedback on the meetings and letting the principal know what he or she can do to help them.

### **Methods That Make Meaningful Use of Data**

There are some teachers who have been professionally trained on how to collect, analyze, synthesize, and make meaningful use of data. One of the models used for training this is The Data Wise Improvement Process (DWIP). It requires teachers to use

standardized testing results but also use student work completed in the classroom, to make instructional decisions about their practice. DWIP is a collaborative approach to school wide instructional improvement that gives teachers a safety net for taking risks and improving their craft. After using this method as a means of determining what to do with standardized testing results, solutions about student achievement were easily made by teachers (Boudett, City, & Murnane, 2005). Additionally, after teachers failed to make connections with the results of data from standardized test and what they knew about instruction, they were instructed on implementing the Coaching and Facilitation Method (CFM) of using data (Blachowicz, Buhle, Frost, & Bates, 2007). The CFM model demonstrates how to connect one known body of information with another. Teachers trained in this model learn how to connect assessment results with instructional decisions. It derives from the thinking that instructional improvement requires more than just presenting the data and expecting it to automatically transform teacher's thinking (Blachowicz et al., 2007). This method requires that teachers have time to think about their practice and the data produced from their students. The results of the study revealed using CFM method for data analysis can inform instructional decisions (Blachowicz et al., 2007).

In addition to the CFM model of training teachers, The Collaborative Method (CM) of using data requires teachers to make decisions about data as a team. Huffman and Kalnin (2003), in support of CM, studied eight district teams engaged in a yearlong data-based inquiry process and found that team members reported growth in their systems' curricular coherence and their own professional knowledge. It was also concluded by Wayman and Stringfield (2006) that data use was most effective when

teachers could work together to formalize expectations, review evidence of student learning, and participate in instructional decision making. This was in comparison to teachers working individually.

The CFM and the CM models of training teachers to collect, analyze, synthesize, and make meaningful use of data has proven to be very effective in helping teachers to improve their practice. Another model used to train teachers on how to use standardized testing results is Data Driven Decision-Making (DDDM). The foundation of the DDDM model comes from successful practices from industry and manufacturing, such as Total Quality Management, organizational learning, and continuous improvement (Deming, 1986; Juran, 1988; Senge, 1990). DDDM requires teachers to use standardized testing data in school improvement planning, site-based decision-making processes, and school-system strategic planning (Massell, 2001; Schmoker, 2004). Though it is a version of the collaborative model, DDDM requires teachers to work in teams using essential questions that evolve from group discussions concerning teaching practices in the classroom.

### **Statement of the Problem**

Teachers have experienced ongoing pressure to meet NCLB (2001) mandates to improve instruction and student achievement. The law requires teachers to use assessment data in an effort to increase student achievement. Assessment data identifies the link between teaching practices and student performances so that high achievement levels can be obtained (Miller, 2000). There is an increasing body of literature that suggests that the use of high-quality, assessment data, can also improve instruction. For instance, schools that have demonstrated success in “closing the gap” that exists between white students and students of color, as it pertains to achievement, were more than likely



to disaggregate and analyze state assessment data (Evaluation Section, Division of Accountability Services, North Carolina Department of Public Instruction, 2000). Additionally, using state assessment data to drive improvement was recognized as an instrumental piece to success in a report created by the National Education Goals Panel after a series of hearings designed to find examples of successful schools and to understand why those schools were succeeding (Rothman, 2000). However, teachers' perceptions of test results and their usefulness continue to waiver as a precedence for data use had not been established prior to the 2000's. For instance, Goslin, (1967) revealed in an early study that the majority of teachers had little use for standardized test data. Additionally, he stated that teachers were not completely confident in their understanding of standardized tests and the results they produce. Stetz and Beck's (1979) findings mirrored those in Goslin, (1967), in that, they had teachers who reported using test results for diagnosing students' strengths and weaknesses. Stetz and Beck (1979) also reported that 80% of the teachers had little use of the data from standardized test. Additional research that followed concerning teachers' perception of standardized testing results also showed that mandated state tests were of little relevance to teachers, that teachers paid state test little attention, and that they viewed test results as relatively unreliable sources of information (Salmon-Cox, 1981; Don-Bremme & Herman, 1983; Ruddell, 1985).

Though most of these studies were dated and conducted before NCLB (2001), current research on standardized tests and standardized test results reveal that teachers' perceptions of state test were still unfavorable, for instance, Earl & Katz, (2006) discussed in the findings of their study that teachers were not actively using data to guide their planning and instructional decisions. It was also revealed that 80% of Georgia

teachers were using their own assessments more than state standardized test (Stecher and Hamilton, 2006). In contrast, Snow-Renner (2001), in an effort to get teacher's perspective of standards-based education as it pertained to data use, used a qualitative survey to interview 806 teachers in Midwestern states and found that they used data to align curriculum and monitor student progress. This study furthered researchers understanding of how teachers were using data, and enlightened educators on teachers' perspective of standardized testing data.

Current research as it pertains to teachers' belief and use of standardized testing data is sparse. Researchers and school leaders alike need more information on how teachers are using standardized testing data, in an effort to continue to assist or learn how to assist teachers in improving their practice, but more importantly, in an effort to increase learning in all students. This is particularly important when comparing what teachers are supposed to be doing with standardized testing results to what they are actually doing with these test results, considering the mandatory mandates of NCLB (2001). Very few studies exist currently that evaluate teachers' understanding of standardized test data. This study addressed these gaps in the literature as the purpose is to identify the perceptions of how Georgia middle school teachers, in Brewton County, use standardized criterion referenced state testing data.

### **Research Questions**

The following overarching question was considered in this study:

What are the perceptions of how Georgia middle school teachers, in Brewton County, use standardized state testing data?

The following sub-questions will be used to answer the overarching questions:

Sub-question 1: To what extent do middle-school English/Language Arts and mathematics teachers' believe that standardized test data is useful as compared to other content area teachers?

Sub-question 2: To what extent do middle-school English/Language Arts and mathematics teachers' use standardized test data as compared to other content teachers?

Sub-question 3: To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?

### **Significance of Study**

The intent of studying the perceptions of Georgia middle school teachers in Brewton County regarding the use of standardized testing data was beneficial to the researcher, as it had personal, professional and practical significance. The results from this study may provide direction for school and district leaders need for professional development, and the need to assist in the planning and implementation of effective strategies to increase the influence of leadership, instruction, and student achievement. The results of this study may also benefit principals' effort in understanding how to support teachers' in using data and may assist the school district's local professional development efforts to ensure that teachers are trained and prepared to effectively use data to increase and guide student performance on standardized state criterion tests. Last, given the fact that few studies place a single focus on the teacher's perspective regarding the use of standardized testing data and that no studies have been documented, to date in Georgia, this study is timely and important for the future of the profession.

### **Research Procedures**

The approach of this study was quantitative, in that, the design of it called for administration of an instrument for data collection, which helped with rapid turnaround (Creswell, 2003, Gay & Airaian, 2000).

Survey research is non-experimental, which means, that in this study, phenomena was studied as it exists. The collection of data, using a cross-sectional survey, was paper and pencil, with a 4-point Likert-like scale. A Cronbach's alpha was used to determine internal consistency reliability of the researcher developed survey instrument. The researcher limited the number of questions on the survey to 40. This ensured that the survey was not too tedious for the participants, hopefully, encouraged greater participation in the study. The survey consisted of statements that helped determined the perceptions of Georgia middle school teachers, in Brewton County, regarding the use of standardized testing results. A demographics section in the survey, identified age, years of experience, and content area taught by teachers, this was useful information to study in analyzing the perceptions of how Georgia middle school teachers use test data.

### **Sample and Population**

This study incorporated all of the four middle schools in Brewton County. Brewton County School District (BCSS) has approximately 20,000 students, in addition to elementary and high schools, the district have four middle schools with very diverse populations. Two of the schools have majority student populations of low socio-economic students as determined by the high number of free or reduced-price lunches; of the other two, one is considered a middle-class school, and the other is termed economically privileged.

### **Data Collection and Analysis**

Data for the study was collected by the researcher, by attending the faculty meetings of the four middle schools in the county. In an effort survey the maximum number of middle school teachers, the researcher left blank surveys for them to fill out upon their return and teachers were allowed to send those surveys back to the researcher via the school district's inter-county mail service. The result of the study was analyzed using the statistic software program, Statistical Package for Social Science (SPSS).

### **Delimitations**

The parameter of this study was limited to the only four middle-school schools in Brewton County and thus may not be generalizable statewide. The sampled middle schools drawn from Brewton County were not representative of all teachers in the school district. However, it should be generalize to other districts within or outside of Georgia.

### **Limitations**

There have been very few current survey research studies that have evaluated middle school teachers' perceptions concerning the use of standardized criterion state testing data. The level of teachers understanding of how to use standardized criterion state testing data to effect change was a limitation and may influence the results of the study.

### **Summary**

For more than 100 years, educators have been using standardized tests and the results from them to make instructional decisions. This process of adjusting the instructional approach to accommodate students better is significant with today's educators. The research of this study determined Georgia middle-school teachers, in

Brewton County, perception as it pertains to using standardized testing. The study was based on a quantitative approach and was experimental in type. The importance of this study to the profession was that it served as another significant tool to assist school leaders and teachers in the use of standardized test data to improve instruction.

## Chapter II

### REVIEW OF RESEARCH AND RELATED LITERATURE

#### Introduction

*Nation at Risk* was to research universities and public schools as *September 11* was to the arms and security industries (Bracey, 2003). This report ended the minimum competency movement and began the high-stakes testing movement that would raise the nation's standards of achievement drastically (Bracey, 2003). In 1989, the nations' governors issued a call for "world class" standards to guide educational practice and the National Commission of Teachers of English and the National Commission of Teachers of Mathematics were asked to create these national standards (McKnight et. al, 1987; National Governors Association, 1989; Travers & Westbury, 1989). The standards movement reached new heights in 1994 when Congress passed three interlocking pieces of legislation, *School to Work Opportunities Act*, *Goals 2000: Educate America Act*, and *Improving America's School Act*. These three pieces of legislation jointly promoted voluntarily national academic standards, and assessments, with particular emphasis placed on mathematics and reading (Wills, 1994). These three pieces of legislation also encouraged states to assess if schools were making progress and if they were not, sanctions were supposed to be imposed but these pieces of legislation lacked much force (Mapping America's Educational Progress, 2008).

January 8, 2001, President George W. Bush signed the reauthorization of Elementary School Education Act entitled the *No Child Left Behind Act of 2001* and

unlike the three major pieces of legislation passed in the 90's, that launch the standards movement. NCLB (2001) has major ramifications and penalties for schools systems across the country for not meeting mandates of this law as accountability through student assessment was the focal point. NCLB(2001) also required that all students make academic progress, as documented by student assessment, and test results would be used to measure student achievement, teacher performance, and school's structure (Downey, 2002).

The implementation of standards-based accountability under NCLB(2001) presents opportunities for data use by giving teachers new sources of data for analysis, as well as, increasing the expectations on them to improve student achievement on test scores (Massell, 2001). However, many educators did not have training or experience in using data to make decisions and thus felt overwhelmed by the prospect (Ronka, Lachat, Slaughter, & Meltzer, 2008). This in essence had a lasting impact on teachers' perspectives concerning how useful testing data would be to their daily practice.

The purpose of this chapter is to review the body of literature and empirical research focused on middle school teachers' perception regarding standardized state criterion test results. This chapter was divided into six segments of reviewed literature considered by the principle investigator to be relevant to data use by public school educators, which is the primary focus of this study. The first component of the literature review was the historical perspective on the evolution of testing. The purpose of testing and its pros and cons were revealed through the literature review. Next, literature was reviewed that considered the perspectives on the barriers of using data, and how principals influence the use of standardized test data in schools. Last, literature was



reviewed that discussed suggested methods to help teachers collect, analyze, synthesize, and make meaningful use of data.

### **History of Testing**

The stated objective of early standardized tests was to ensure that all children had equal opportunity to receive the same academic level of education (Haladyna, Haas, & Allison, 1998). As early as 1840, an exam designed to monitor school's effectiveness was implemented in Boston, Massachusetts (Resnick & Resnick, 1982). This exam included many features of today's large-scale tests. The exam was developed to provide efficient measurement for large numbers of students and to facilitate comparisons across classrooms and schools (Resnick & Resnick, 1982). In 1909, the Thorndike Handwriting Scale was the first popular standardized achievement test used in public schools (Perrone, 1991). A wide array of tests soon followed; nonetheless, it was not until 1923 that researchers began to think about how best to use results produced by standardized test. It is suggested, during this period, that teachers should use achievement tests as helpful tools for improving their work, and that, individual test results could be used to ascertain that pupils in each class were in the greatest need of remedial teaching (Mort & Gats, 1923). Standardized testing programs began a substantial upward spiral after the 1950's and through the late 1960's and even though the suggestions to teachers to use standardized testing data was first made during this era, the research of what teachers were actually doing with these results was sparse.

As the use of standardized testing continued to grow in the 1960's, researchers and testing authors continued to look at standardized test, but they also continued strategizing on how best to use the results standardized tests produced. As they turned

their attention to the testing results, they also focused attention on the teacher in the classroom. Testing authors were aware of the educational implications of the data provided by their testing instruments. Ruch and Terman (1926) maintained the following:

*We are no longer content with tests so rough that they are useful only for comparing one school or one city with another. We now demand that a test shall give a dependable measure of the individual pupil, in order that we may use his score for placing him in the grade where he belongs. This is the most important function of standard tests of every kind, a function which requires that the probable error of a score shall be a relatively small fraction of the increment between successive grade means. (p. 7).*

Terman called for the test score to “be taken as the point of departure for further study of the pupil” (Terman, 1923, p. 25). For instance, in the event that a student’s test score did not match with what the teacher knew of the other attributes of the student, then more study, and possibly additional standardized testing, and the collection of more data were necessary. An increasing emphasis was placed on using test data, not just for record collections of data (Mort & Gats, 1923), but for measuring student achievement. The manuals for achievement tests advised administrators and teachers to use test results for reasons such as placement into academic learning groups, counseling groups, career education, and vocational plans (Wigdor & Garner, 1982). However, test data was already being used during this decade for diagnosing students with individual learning difficulties, for appraising, and for modifying instructional methods (Wigdor & Garner,

1982) and these methods of using data, according to the research, were more substantial and were of greater use to teachers' practice than beforehand (Mort & Gats, 1923).

In addition, to the increase emphasis placed on using standardized test and the recommendations for how standardized testing results should be used, there were still concerns by educators about the effectiveness of these tests. According to Goslin (1967), for decades, teachers only infrequently used the results of standardized tests and reported virtually no influence of test content on teaching methods or course content. Supporters of measurement-driven instruction or standardized tests (e.g., Phelps, 1996; Popham, 1987) argued that if tests measured important skills, like memory, a student's ability to read, write, and do arithmetic, and also, if tests had sufficiently high stakes, they would serve as instructional magnets, thus dramatically improving the efficiency and effectiveness of instruction. However, standardized tests were beginning to impact many other professions; for instance, the U. S. Army used a large-scale group intelligence test called the Army Alpha Test during the World War I era (Wigdor & Garner, 1982). They used it in the selection of officers and for a variety of other classification purposes. Additionally, psychologist, during the industrial revolution, helped business men, come up with their own standardized test to screen potential employees, and they used the results of the test to place Americans in appropriate jobs and to ensure that U. S. companies receive the services of competent men and women (Cremin, 1964).

As the nation progressed through the early 1900's, the pressure to improve public education continued to increase. The National Assessment of Educational Progress (NAEP) and the 1965 Elementary and Secondary Education Act (ESEA), were the first two institutions to formally use tests for monitoring the performance of the nation's

students (Wigdor & Garner, 1982). The law gave greater decisions making power to teachers, however with this new autonomy there was a greater responsibility placed on teachers for increasing student achievement through the use of standardized test results (Wigdor & Garner, 1982). However, the sentiment by Americans at the time was that children were not learning as much as they could and that test scores were reflective of the quality of the public school system (Goslin, 1967).

Therefore, in an effort to improve the quality of public schools during the 70's Minimum Competency Tests (MCT's) became the definers of standards in almost all curricular academic achievement. This accountability movement led states to prohibit failing students from graduating or from being promoted to the next grade. This movement also represented the first formal use of tests as tools to hold students and teachers accountable for performance (Hamilton & Koretz, 2002). Minimum Competency Testing movement was to serve as signals to students and teachers of what should be taught and learned respectively; in essence, it marked the shift toward measurement-driven instruction, or instruction that would be shaped by standardized tests (Hamilton & Koretz, 2002).

Though it was paramount in improving the quality of education, the minimum competency testing era also had significant negative influences on public school's instruction, for instance, it did not educate students to compete in a global economy. MCT's did not help those students it was intended to help, which was those at the lowest end of the achievement distribution, additionally, teachers, in an effort to control their failure rate, did not promote their weaker students and teachers who had students at the higher end of the learning spectrum did not challenged them academically (Marion &

Shinker, 1999). MCT's movement marked a belief that instruction can and should be shaped directly by tests (Marion & Shinker, 1999), last, though this movement marked a belief that instruction can and should be shaped directly by tests, and that teachers will be held accountable for the performance for students on these test. Research reveals that teachers still were not using them, for instance, Stetz and Beck (1979) conducted a national study of more than 3,000 teachers' opinions about standardized tests. They noted that 41% of the teachers surveyed reported making little use of test results. The study revealed that these results were only supplemental to the wider variety of information that teachers already possessed. The study also revealed the reasons offered for why standardized tests are given but results not always used by teacher's, for instance, there was a perceived narrowing of the curriculum, resistance to management control, accountability avoidance, and a limited understanding of score interpretation resulting from inadequate pre-service training ( Gullickson, & Hopkins, 1987).

Thus, up until the 80's there were many changes to improve the quality of public education and the negative direction it was headed in; from the government passing ESEA and commissioning the creation of a national test to monitor progress public schools were making in the form of NAEP. The 70's witnessed the MCT movement in which students were required to have a minimal understanding of core subjects, but this minimal understanding did little to impact the positive quality of education in American schools. In 1983, the National Commission on education released the report *A Nation at Risk: The Imperative for Educational Reform*. It "called for an end to the minimum competency testing movement and the beginning of a high-stakes testing movement that would raise the nation's standards of achievement drastically" (Amrein & Berliner, p. 43,

2002). As a result of this report, testing increased greatly in American Public Schools and written in this report, were several recommendation, one of the recommendation stated that standardized state tests be administered at “major transition points from one level of schooling to another...”(Amrein & Berliner, p. 44, 2002).

During the 1980's, approximately 30 major reform reports appeared which consistently read that education in the public schools fell short of providing students with “excellence in education” (Cross, p. 8, 1987). These reports also revealed that in determining what children were learning in schools during this time, reformers used assessments - school wide, statewide, and nationwide (Cross, 1987). “Issues of testing in the 1980”'s was social, economic and value laden. “They involve the allocation of resources and prerogatives...” (Airasian, 1987, p. 409).

Thus, standardized tests suddenly became the bottom line, which critics used to determine if our students were learning, although they had been used in American Schools for almost seven decades prior to this reform movement (Madaus, 1985). However, despite the sentiments of critics research supported the fact that data from standardized achievement test was still only a secondary criterion in teacher judgment (Airasian & Madaus, 1982).

The use of standardized test shifted in the 80's from their use in the classroom to their use in administrative decisions and policy development (Rudman, 1987), and thus, the push in education from minimum competency to more rigorous standards and for tests that are aligned with those standards would be the future how state achievement tests would be in American schools of the future (Resnick & Resnick, 1992). The standards movement reached new heights in 1994 when Congress passed three

interlocking pieces of legislation, *School to Work Opportunities Act*, *Goals 2000: Educate America Act*, and *Improving America's School Act*. These three pieces of legislation jointly promoted voluntarily national academic standards, and assessments, with particular emphasis placed on mathematics and reading (Wills, 1994). Additionally these three pieces of legislation were supposed to increase the pressure on schools across the nation to improve but they lacked much force (*Mapping America's Educational Progress*, 2008).

However, with the birth of NCLB in 2001, not only did it impose a high degree of pressure on public schools to improve, unlike *School to Work Opportunities Act*, *Goals 2000: Educate America Act*, and *Improving America's School Act*, this particular law required teachers to teach to the required standards, and standardized tests and the results they produced became the indicator used to hold schools accountable for student achievement (Downey, 2002). NCLB (2001) also required that public schools across the nation adopt content standards in English, mathematics, and science however, it required annual assessments in mathematics and reading, and it required that students reach proficiency in these two subjects by 2014. The State of Georgia, taking its lead from this federal mandate, passed the *A-Plus Education Reform Act of 2000* (as amended in 2003) and it required that all 3<sup>rd</sup>, 5<sup>th</sup>, and 8<sup>th</sup> grade students pass the Reading (English/Language Arts) and mathematics portion of the Georgia Criterion Reference Competency Test (GaCRCT), if not, they would be retained in their respective grades (Georgia Department of Education, 2002).

Historically, as early as the 1800's, educators and researchers believed that standardized test results could be a resource for teachers to improve their practice and to

gauge students' progress (Haladyna, Haas, & Allison, 1998). Minimum Competency Tests served as a step towards improving education but it was not until the report, *A Nation at Risk* was published that the standards for improving American Schools would increase drastically (Amrein & Berliner, 2002). Three pieces of legislation jointly promoted the standards movement, *School to Work Opportunities Act*, *Goals 2000: Educate America Act*, and *Improving America's School Act* making educators more accountable, however, with the passing of NCLB Act of 2001, schools, school systems, and states, faced major sanctions for not meeting the mandates of this new law (Mapping America's Educational Progress, 2008). Heighten accountability through student assessment brought about a division in the views concerning the importance and the role standardized testing and the use of testing results, would play in public schools. In essence, it created a divide of individuals who were "for" and "against" testing (Amrein & Berliner, 2003).

### **Pro's and Con's of Testing**

Opponents have found that there is very little evidence existing that shows that the implementation of testing programs have demonstrated an increase in student achievement or improvements in teaching (Allington, 2000; Amerin, 2002; Linn, 2000; Paris & Urdan, 2000). Most standardized tests were not designed to measure the results of teaching or curricular achievement (Popham, 1999). Opposing educators of testing believed that standardized tests most important contribution was to provide an additional source of evidence about pupils to corroborate the teacher's judgment, to suggest unnoticed problems, and to provide pertinent information about student learning however, the opposition claims, there are suggestions and needs for more one-to-one, in-



depth diagnosis for these claims to be true (Gardner, 1987). A review of past practices, concerning data utilization, suggests that, teachers' use of standardized test results were minimal in making instructional decisions (Fennessy, 1982; Green & Williams, 1989; Lazar-Morison, Polin, Moy, & Burry, 1980; Ruddell, 1985).

### ***Studies Support the Opposition***

Stecher and Hamilton (2006) revealed that 80% of educators in Georgia found that results from local assessments to be more useful for decision making than state test results. Additionally, they found that teachers in Georgia believe that these test were more helpful in identifying and correcting gaps in their teaching than state tests were. Furthermore, other studies revealed that standardized tests and the results they produce gave a narrow reflection of the total school program (Hoyt, English, & Sheffy, 1985). However, the public, during this time, continued to make comparisons, on how well a school or schools were doing based on standardized tests and the results they produce even though the scores were a narrow reflection of the school, but educators warned the public against using the results of tests to judge schools and teachers (Gabler, 1987). Teachers realized however, that because tests were going to remain tools for public decision-making and policy formation, the choice for educators was either to use the tests or to be used by them (Madaus, 1985). Barnes, Moriarity, and Murphy, (1985) concurred with the proponents of testing, in that, they contended that test results should certainly be part of the needs assessment, educational planning, and even budget decisions when priorities are determined and goals are set in response to all learning deficiencies within the student population. But in a slight nod to opponents of testing they believed there was

still difficulty using standardized tests and the results they produce properly inside of schools.

One of the reasons challenges existed for using state test and the resulting data, the opposition contended, was because the procedures for scoring and managing tests and reporting their results did not squarely address the information needs of teachers and administrators (Schalock, Fielding, Schalock, Erickson, & Scott, 1985). In a study conducted by National Educational Association (1979), they stressed several of the same criticisms about testing that exist today, which were that they are often biased against those who are economically disadvantaged or who are culturally and linguistically different, are often used for tracking and are often invalid, unreliable, and restricted to the measurement of cognitive skills. Additionally, other criticisms regarding tests were the concerns that test were used by book publishers and testing companies to promote their financial interests rather than to improve measurement and instruction, also test were often used as a basis for the allocation of federal, state, or local funds and finally that they were often used by the media as a basis for detractive public comparisons of students and schools (Reynolds & Kamphaus, 2003). Despite these many criticisms of standardized tests, they remained a part of the public school culture, and states across the nation continued to adjust the administration and format of standardized tests to make them more easy to use.

Proponents of testing believed that students and teachers need high-stakes tests to know what is important to learn and to teach respectively (Amrein & Berliner, 2002). They also asserted that standardized testing and the theory of action implied by these accountability pressures of high-stakes testing will increase student achievement

(Nichols, Glass, & Berliner, 2005). In what proponents of testing consider to be a move to better support the use of standardized testing data, The U. S. Department of Education has changed accountability and testing policies and has provided educators with access to an abundance of student-level data. They are calling upon schools to use this assessment data to respond to students' academic strengths and needs (American Recovery and Reinvestment Act of 2009; U. S. Department of Education, 2009).

Proponents of testing also believed that with the ability to access this amount of data and the means to harness the information it can provide, educators could make instructional changes that are aimed at improving student achievement. Furthermore, proponents of testing also believed that by prioritizing instructional time, targeting additional individual instruction for students who are struggling, and by more easily identifying individual students' strengths and using instructional interventions that can help students continue to progress, testing would have an impact on teachers practice that was paramount (Brunner et al., 2005; Forman, 2007; Halverson, Prichett, & Watson, 2007; Kerr et al., 2006; Marsh, Pane, & Hamilton, 2006; Suppovitz & Klein, 2003; Wayman & Stringfield, 2006).

Thus far proponents of testing believe that it was important because it assisted in determining what to teach and learn and they felt that testing would increase student achievement. Additionally, in an effort to respond to students' academic strengths and needs, proponents of testing also believed that educators could gauge the instructional effectiveness of classroom lessons, refine instructional methods and last, proponents of testing believed, that by examined school-wide data teachers could consider whether and how to adapt the curriculum based on information about student's strengths and

weaknesses (Halverson, Prichett, & Watson, 2007). State testing results can also be useful for understanding broad areas of relative strengths and weaknesses among students and identifying students, or groups of students, who may need particular academic support (Halverson et al., 2007; Lachat & Smith, 2005; Wayman & Stringfield, 2006). Proponents and test makers alike advised that by comparing students, classroom, or building scores with local and national norms, teachers can identify individual or group strengths and weaknesses for the purpose of adjusting the curriculum (Hoover, et al., 2003). Proponents also believed that standardized tests and the resulting data could also be used for a variety of action decisions around instruction, curriculum, and professional development (Marsh, Pane, & Hamilton, 2006).

Many studies support the views of those who believe in testing, in that, the research from these studies identifies planned and extensive use of standardized testing results as a common characteristic among schools that are high performing (Council of Great City Schools, 2002; Snipes, Doolittle, & Herlihy, 2002; Viadero, 2004). For this reason, educational pundits have advocated that attaching stakes to test is necessary to hold schools accountable, reward high performing schools, and identify failing schools so they may be targeted for extra help (Wright, 2002).

Politicians believe that tests are useful instruments and can be considered agents of reform because: (a) they are relatively inexpensive, compared to other changes, like reducing class size, and hiring teacher aides; (b) they can be externally mandated, which is easier than trying to change what is going on in each individual classroom; (c) they can be rapidly implemented (while the elected officials are still in office); and (d) test results are visible because they can be reported to the press (Linn, 2000; Smith & Fey, 2000).

Strong public support for the use of standardized tests existed, for example, in 2000, a survey of more than 1,000 parents of school-age children commissioned by the Association of American Publishers (AAP) discovered that a majority of American parents support standardized testing; the study also found that 83% of parents surveyed indicated standardized tests provide very important information and that 90% of parents surveyed wanted comparative data about their children and the schools they attended. Additionally, 74% of parents surveyed said they get information about their children's progress from test scores (Driesler, 2001).

In his article, *More Unintended Consequences of High-stakes Testing*, Cizek (2001) argued that 10 good “unanticipated consequences” have come out of the emphasis on testing:

- Professional development: Professional development is focused on what works and is aimed at helping teachers improve their teaching skills content-area expertise.
- Accommodation: Students with special needs are receiving more attention in their classrooms. By law high standards apply to all students, and because scores are reported by subgroups, teachers are more sensitive to the needs and barriers faced by these students.
- Knowledge about testing: provoked teachers to learn more about testing than in previous years.

- Collection and use of information: More information about student performance is available and is being used to help educators improve programs and channel available funds.
- Educational options: More educational options are available for students (for example, charter and magnet schools, and more honors, International Baccalaureate, and Advanced Placement courses).
- Accountability systems: High-stakes tests have produced accountability systems for districts, schools, principals, teachers, and students.

Additionally, opponents of high-stakes tests believe that these tests are not useful because of the large amount of time that passes between the administration of these annual assessments and the beginning of the school year, thus they believe that students' knowledge and skills may have changed during the intervals of the testing times (Hamilton, 2003). Additionally, opponents believe that an overreliance on a single data source, such as a high stakes accountability test, can lead to the over alignment of instructional practices with that test, resulting in false gains that are not reflected on other assessments of the same content (Hamilton, 2003). Clarke et al. (2003) reported that attaching high stakes to the testing program can adversely affect the instructional program, have a negative impact on at-risk students, and at the same time, not show improvements in teaching and learning.

Although teachers are encouraged to use testing data to modify instruction, opponents counter that the pressure to show success on standardized tests is not allowing teachers to teach in-depth. They argue that these tests narrow the curriculum and force

teaching to the test (Nichols & Berliner, 2005). Amrein (2002) found that in many schools, tests were driving the instruction. In that students' exposure to high quality, rigorous curriculum was being diminished, and an excessive amount of time was being spent on activities that focus on different aspects of tests, which in essence, drove what was being taught (Stecher & Chun, 2001; Pedulla et al., 2003; Jones et al., 1999). Additionally, Amrein (2002) also revealed, in his study, disconnect in what teachers were doing in the class and the professionally development they were being provided in their school district. The curriculum was directed to subject and content areas being tested and that staff development was geared to test score improvement. Last, high-stake tests also tend to provide results only offering a snapshot of student performance and most school districts do not link student achievement to teacher practices in such a way that educators can help determine what is working (Hess, 2009).

As testing gained prominence in the American Public Educational System it, also gathered its share of supporters and detractors. Supporters of testing believed that the results it produced would make a difference in improving the learning of all children because it gave teachers evidence of learning that was of substance (Kerr et al., 2006). However, the opposition countered that these same testing results did not squarely address the information needs of teachers (Pedulla et al., 2003). Additionally, the opposition also believed that because teachers were becoming over reliant on these tests, it allowed for testing to dictate instruction (Pedulla et al., 2003).

### **Barriers**

In the current era of evidence-based instructional practices, the use of data is an important tool in student improvement. It can shed light on existing areas of strength,

weakness, and it also can guide improvement strategies systematically and strategically (Dembosky, Pane, Barney, & Christina, 2005). Research has revealed that many school districts are starting to look at how to use data, but this new emphasis on data necessitates knowledge and a skill set not taught regularly to most teachers (Englert et al., 2005). This lack of knowledge and training have presented barriers in teachers efforts to use standardized testing results, for instance, several studies revealed that teachers, even after having a complete year of training, still lacked the ability to interpret standardized testing results, and they had an inability to effectively develop and use classroom assessments (Herman & Gribbons, 2001; Kerr et al., 2006; Marsh et al, 2005; Mason 2002). In contrast, other studies revealed, that teachers, who were given adequate and consistent training, increased their use of data, and as a result, test scores, and student learning improved (Feldman & Tung, 2001; Schmoker & Wilson, 1995).

These contrasting views concerning standardized tests and the results they produce only added to the problems of research on teachers' utilization of state achievement data, which in essence, added to the already existing barriers concerning data use. Additionally, there were other concerns that limited data use, for instance, studies revealed that teachers often devalued standardized test data because they had developed their own personal assessments for determining what children have learned which had little to do with tests other than those they created themselves (Ingram et al., 2004). Teachers noted that often they get data too late to use it to impact their instruction, or they did not receive data at all from their state accountability system. The research disclosed that if teachers felt as though they were not going to get the testing results back in enough time to prepare for proper instructional planning, then future use of these



standardized tests were less likely (Kerr et al., 2006); this coupled with a lack of resources (time, training, or personnel) to support data use encumbered educators ability to use state test effectively (Englert et al., 2005). Supovitz and Klein (2003) study supported the belief that there were educators who could not use data effectively. For instance, there study revealed that only 19% of the 68 administrators in the schools they surveyed believed that they had the skills to manipulate data to answer the questions in which they were interested.

In addition to teachers' inability to interpret data results, their lack of knowledge and skill to use data, and their lack of understanding of how to use data results in their day-to-day planning, teachers' belief in standardized tests validity posed another barrier to data use. Several empirical studies have offered strong evidence demonstrating that teachers did not believe in the validity and reliability of standardized assessments (Feldman & Tung, 2001; Herman & Gribbons, 2001; Ingram et al., 2004), in that, teachers questioned if the test were actually a reflection of what the students learned. This uncertainty concerning validity and reliability affected some teachers' buy-in or support of data (Feldman & Tung, 2001; Herman & Gribbons, 2001; Ingram et al., 2004) however, Choppins (2002) study, counters this claim and reveals that regardless of the perceived lack of quality, teachers used the data because of the high stakes attached to state tests.

Other studies revealed additional barriers that prevented teachers from using data effectively, for instance, Kerr et al. (2006) study revealed that teachers opted to follow the curriculum instead of the data, because they believe that they were unprepared to use the data. In addition to being unprepared to use data, teachers also often lack the

minimum understanding to create questions, select indicators, interpret results, and develop solutions when analyzing state testing data (Choppin, 2002; Feldman & Tung 2001; Mason, 2002; Petride & Nodine, 2005).

### **Principals' Role in Data Use**

Understanding how teachers use standardized testing results is imperative in school leaders' ability to ensure increased learning in all children (Halverson, Prichett, & Watson, 2007). School principals play a crucial role in getting teachers to use data. Supovitz and Klein (2003) revealed in their study, "Virtually every example of innovative data use in this study came from the initiative and enterprise of an individual who had the vision and persistence to turn a powerful idea into action" (p. 36). These individuals, according to Supovitz and Klein, are the school principals. In their attempt to enhance the use of standardized test results by teachers, principals can offer professional development that helps teachers learn how to evaluate data and use it effectively. The professional development should focus on how users will apply the data to their daily work and instructional planning (Wayman & Cho, 2008). Moreover, principals must also establish a strong culture and vision, in their attempt to increase data use by teachers and in their effort to ensure that data-based decision are being made appropriately (Datnow, Park, & Wohlstetter, 2007). A strong culture of data use, conveyed through a clear school-wide vision, by the school leader, is critical to ensure that data-based decisions are made routinely, consistently, and effectively (Datnow et al., 2007). Research studies have revealed that school leaders, who can demonstrate how to use data and are committed to using data, thus create a solid vision for data use in their

schools. A clear plan for school wide data use is essential to developing such a culture (Detert et al., 2000; Mason 2002; Lachat and Smith, 2005; Mieleles and Foley, 2005).

In addition to a clear foresight and creating a positive culture for data use, principals can also establish data teams, in their effort, to create shared leadership that will clarify and guide the school's vision for the most effective use of data (Halverson & Thomas, 2007). Shared leadership roles are important to principals in their effort to increase data usage by teachers. By establishing shared leadership structures and nurturing lead teachers, principals can strengthen the voice of teachers in school decisions and in assuming responsibility for results (Duke, 2007). Furthermore, these individuals, can also encourage staff to use data systematically (Wayman, Cho, & Johnston, 2007). Similarly, in addition to shared leadership structures, school leaders can establish data teams. Several studies revealed that the establishment of a data team responsible for collecting and analyzing data contributes an essential element in the effectiveness of data use in schools (Bernhardt, 1998c; Noyce, Perda, & Traver, 2000; Parsons, 2003). These teams would be responsible for analyzing test data and based on this analysis would create improvement plans for the school (Wayman, Midgley, & Stringfield, 2005). Additionally, in a longitudinal study conducted by Chrispeels et al. (2002), it was revealed how working together over time as a team, using test data, built camaraderie and created empowerment among the members of the team. This study also showed that as the data team learned more about standardized test results and as they increased their use of these test results, data informed important decision about their self efficacy.

In addition to establishing data teams, the principal can also provide data facilitators. They may be full-time teachers or an individual who provides coaching to other staff members. According to Chrismer et al., (2006) and Wayman et al. (2007), data facilitators can also model how to transform daily classroom practices based on data-driven diagnoses of student learning issues. They can also assist staff with data interpretation by preparing data reports and related materials, and data facilitators can train and support staff on using data to improve instructional practices and student achievement. This idea is important as some believe that educators are not trained to evaluate data or translate state testing results into on-the ground practices that can improve student achievement (Dynarski, 2008).

Influence on data use also includes allowing time for teachers to immerse themselves in daily inquiry into their classroom practice (Armstrong & Anthes, 2001). Studies have revealed that teachers complain that they were challenged by a lack of time for data analysis (Feldman & Tung, 2001; Ingram, Louis, & Schroeder, 2004); therefore, by principals allowing time for teachers to be fully engaged and immersed in data results improves their enthusiasm for using standardized test data, as this procedure has been found to provide useful information for teachers' classroom practice (Symonds, 2003). Principals also play a significant role in allowing time for teachers to have dialogue about how best to use data, a principal's ability to communicate goals and have teachers commit to those goals has proven to be very effective in influencing teachers' use of data (Latham & Locke, 2006). A part of visionary leadership is articulating goals and winning commitment to such purposes like having teachers use data exhaustively in improving student learning (Hallinger & Heck, 2002). A study conducted by Georgia's Leadership

Instruction for School Improvement (GLISI, 2008) revealed that operant administrators used a data-driven approach to leadership based on collecting and synthesizing multiple sources of data. This approach guided decisions as it pertained to allocations of resources for instruction and curriculum and was deemed most appropriate to improving not only instruction and student achievement but also help with assisting teachers from operating in isolation, particularly, when making decisions with standardized testing data.

In addition to allowing time for teachers to analyze and have dialogue about data, and principals' ability to be visionary leaders, school administrators can also make themselves visible, in an effort, to increase teachers' use of data. Chrisman (2005) determined that schools sustain success, and influence teachers' data use, by principals making themselves available during school. This includes the principal's frequent attendance at grade level and departmental meetings. Additional research, by Johnson and Asera (1999), supports that in an effort to be visible and provide further assistance to influence the use of data by teachers, principals can also conduct classroom observations. During this observation of teachers principals can also analyze student work to determine the adjustments needed in instruction, thus they can provide professional development on specific skills to improve teaching and on how to use data in their daily practice.

Principals play a significant role in teachers' beliefs about standardized test and the use of testing results. In an effort to increase teachers' use of data, principals must have a clear vision as it pertains to how data will be used in schools. Also, school leaders must provide professional development and shared leadership roles, and in training teachers to utilize data principals must ensure that the methods (for training teachers) make meaningful use of data.

### **Methods That Make Meaningful Use of Data**

Teachers should adopt a systematic process for using data to improve their ability to meet students' learning needs. One method teachers can use to do this is by making data part of an ongoing cycle. This cyclical process includes collecting and preparing data about student learning from a variety of relevant sources, the main source being state criterion annual assessment data (Halverson, Prichett, & Watson, 2007; Herman and Gribbons, 2001; Huffman and Kalnin, 2003, Fiarman, 2007). After preparing data for examination, the next step in the cyclical process of using standardized testing results requires teachers, to interpret the data and develop hypotheses about factors contributing to students' need, and then they are required to test these hypotheses, by implementing changes to their instructional practice. Finally, teachers are required to restart the cycle by collecting and interpreting new student performance data to evaluate their own instructional changes (Halverson et al., 2007; Abbott, 2008; Liddle, 2000).

The Center for Prevention Research and Development created the Data-Based Decision-Making Model (DBDM) as a means for training teachers to use state testing results. This model contains five steps for using data to make school decisions. The first step is to review the school improvement plan to identify the most salient issues the school wants to improve. Next, is to determine how the data will be examined either, by teams, by departments, or school-wide. The final steps are in a cyclical three-part process: Identify the relevant data, examine and discuss the data, set goals, and evaluate your progress (Flowers & Carpernter, 2009).

Another method used to train teachers on how to use standardized testing data is The Data Wise Improvement Process (DWIP). It requires teachers to not only use

standardized testing results but also to use student work completed in the classroom and to make instructional decisions about their practice. DWIP is a collaborative approach to school wide instructional improvement that gives teachers a safety net for taking risks and improving their craft. After using this method as a means of determining what to do with standardized testing results, solutions about student achievement are easily made (Boudett et al., 2005). In addition to the DWIP, the Coaching and Facilitation Method (CFM) was introduced to educators, after teachers failed to make connections with the results of data from standardized test and what they knew about instruction (Blachowicz et al., 2007). The CFM model demonstrates how to connect one known body of information with another. Teachers trained in this model learn how to connect assessment results with instructional decisions. This particular method of training teachers to use standardized testing data derives from the thinking that instructional improvement requires more than just presenting the data and expecting it to automatically transform teachers thinking (Blachowicz et al., 2007). This model requires that teachers have time to think about their practice and the results produced from assessing their students using state tests. The results of the study revealed that CFM can help teachers use state testing data to inform instructional decisions (Blachowicz et al., 2007).

The Collaborative Method (CM) of using data requires teachers to make decisions about data as a team. Huffman and Kalnin (2003), in support of CM, studied eight district teams engaged in a yearlong data-based inquiry process using this particular method and found that team members reported growth in their systems' curricular coherence and their own professional knowledge. Collaborative data analysis can also highlight achievement patterns across grade levels, departments, or schools (Cromey & Hanson, 2000), and can

engender the kind of consistency of instructional practices and expectations that often characterizes high-performing schools (Bigger, 2006; Herman & Gribbons, 2001).

Wayman et al. (2006) study revealed, as it pertains to using the CM model that data use was most effective when teachers could work together to formalize expectations, review evidence of student learning, and participate in instructional decision making. Research also disclosed that the establishment of collaborative data teams within a school to analyze state testing results is an effective means of using data to drive decision making (Wayman et al., 2005; Chrispeels et al. 2002).

The CFM and the CM models of training teachers to collect, analyze, synthesize, and make meaningful use of data have proven to be very effective in helping teachers to improve their practice (Blachowicz et al., 2007; Huffman & Kalnin, 2003). Similarly, there are other models used to train teachers on to how to effectively use standardized testing results to improve their practice, for instance, the Data Driven Decision Making (DDDM) has been used in several school districts. Supporters of DDDM practices believe that effective data use enables school districts and their teachers to learn more about their schools, pinpoint successes and challenges, identify areas of improvement, and help evaluate the effectiveness of programs and practices (Mason, 2002). The foundation of the DDDM model comes from successful practices from industry and manufacturing, such as Total Quality Management, organizational learning, and continuous improvement (Deming, 1986; Juran, 1988; Senge, 1990). DDDM requires teachers and the school leadership team to use standardized testing data in school improvement planning, site-based decision-making processes, and school-system strategic planning (Massell, 2001; Schmoker, 2004). Though it is a version of the



collaborative model, DDDM requires teachers to work in teams using essential questions that evolve from group discussions concerning teaching practices in the classroom. Also, in order to carry out DDDM it is essential that teachers have adequate skills training in analyzing and using data (Mathews, 2002). According to Datnow, Park, and Wohlstetter (2007), implementing DDDM in a school consists of four key strategies. First, In terms of building a foundation for data-driven decision making, the actions include specific and measurable student achievement goals at the system, school, and classroom levels. The goals must be explicit as this will assist in providing focus for DDDM.

Kerr et al. (2006) conducted a study examining strategies in three districts to promote instructional improvement through DDDM. The study was done to determine what constrained or enabled a district's ability to promote data use for instructional decision making. They completed 72 school visits and interviewed 73 principals, 30 assistant principals, and 50 instructional specialists. Two-thirds of the principals surveyed indicated the district's frequent assessments were a good measure of student progress. 81% found data moderately to very useful for making instructionally related decisions. Teacher responses were mixed. Additionally, 60% of teachers reported that the data they (teacher) collected proved to be more useful information for planning than the district's assessments because teacher made assessments were more accurate and gave more timely information. Though a few studies reveal some evidence of increase learning by students from teachers using DDDM (Feldman & Tung, 2001; Schmoker & Wilson, 1995), there is still limited evidence that DDDM can increase student achievement and most studies on DDDM are primarily descriptive and do not address the effects of DDDM on student outcomes (Feldman & Tung, 2001; Schmoker & Wilson, 1995).

## Conclusion

Historically, the push to use standardized test and the results they produce to gauge students learning has been on a steady incline in American Schools since the early 1800's. The Thordike Handwriting Scale was the first popular standardized achievement test used in public schools, and with its success, many standardized test soon followed. During 50's and 60's, testing began to increase significantly, and more importance was placed on using the test data, for such things as learning and vocational educational groups. However, nothing has had more impact on the United States Educational System than *A Nation at Risk* and the re-authorization of the Elementary and Secondary Education Act (ESEA), known as No Child Left Behind Act of 2001, (NCLB). There impact on bringing notoriety and garnering the American Public attention on the state of public education in the United States has been paramount. NCLB requires schools districts and their schools to use data to measure progress toward standards; furthermore, it requires that educators be held accountable for improving student achievement.

A review of the literature revealed that there are many who are for and against testing. Opponents contended that standardized tests were not designed to measure the results of teaching nor curricular achievement. Conversely, proponents contended that not only can test measure teaching but assessment data can be useful for understanding what a student is learning and not learning. Using data to improve student learning has been problematic for teachers but school principals can reduce the number of barriers to using data by providing professional development that assist teachers with using data effectively and by providing data teams. Data teams can provide remediation and follow-up training how to use the results of state standardized criterion reference tests, which in

essence helps in improving teachers self efficacy and belief in their own ability to use data effectively to affect instruction.

The principal plays a critical role in improving data use by teachers, and by removing barriers the encumber teachers ability to use data, schools and school districts are better able to implement a culture of data use. The review of literature also presented several methods teachers can use to help them collect, analyze, synthesize, and make meaningful use of data. These methods also assist teachers in fulfilling the expectations of NCLB, by allowing them to emphasize the application of the standards of the curriculum, and not allow the curriculum to be overly driven by state standardized criterion tests. For instance DDDM requires teachers to be collaborative in discovering concerns about teaching practices in the classroom. The research also revealed that data was most effective when teachers could work together to formalize expectations, review evidence of student learning, and participate in instructional decision making.

### Chapter III

## **METHODOLOGY**

### Introduction

The purpose of this study was to determine middle school teachers' perceptions of standardized criterion testing data. Research has shown that teachers have greatest influence and effect on students' achievement (Darling-Hammond, 2000; Muijs & Reynolds, 2001; Nye et al., 2004; Robinson & Timperley, 2000). Additionally, research supports the assumption that teacher characteristics and behavior account for more variance in student achievement than any other scholastic input. Considering that teachers have such a profound impact on student achievement, it is imperative that school leaders have knowledge of how teachers use standardized testing data (Sanders, 1999). This chapter presents research questions, research design, procedures for data collection, data analysis, and data representation.

### **Research Questions**

By conducting this study, the researcher addressed the following overarching research question: What are the perceptions of middle school teachers regarding the use of standardized criterion referenced testing data?

The following sub-questions will be used to answer the overarching questions:

Sub-question 1: To what extent do middle-school English/Language Arts and mathematics teachers' believe that standardized test data is useful as compared to other content area teachers?

Sub-question 2: To what extent do middle-school English/Language Arts and mathematics teachers' use standardized test data as compared to other content teachers?

Sub-question 3: To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?

### **Research Design**

The study was designed as a quantitative study as the researcher surveyed 242 teachers in Georgia to determine their perception concerning standardized testing data. A researcher developed instrument was distributed as a hand copy questionnaire. Research Question 1 was analyzed using independent sample t-test to determine if statistically significant differences existed between the means of English/Language Arts and Mathematics teachers when compared to other content teachers in their “belief” in standardized testing data. Research Question 2 was analyzed using independent sample t-test to determine if statistically significant differences existed between the means of Ela/Language Arts and Mathematics teachers when compared to other content teachers in their “use” of standardized testing data. The researcher chose descriptive statistics to answer Research Question 3.

Survey research is non-experimental, which means that phenomena will be studied as it exists. The purpose of survey research is to generalize from a sample of participants to a population so that inferences can be made in regard to the perceptions, attitudes, or behaviors of the population (Strahan, et al., 2003). For the quantitative method, this non-experimental, descriptive research (Campbell & Stanley, 1963), and independent-samples t-tests were used to analyze 40 items on the questionnaire entitled, *Teachers’ Perception Survey* (Appendix A)

### **Population**

The population of the study will be teachers in Brewton County, Georgia, which is an urban county in upper middle Georgia. There are more than 1,800 teachers in the school district, and the district is representative of the state in terms of personnel demographics as indicated below.

### **Sample and Participants**

The researcher administered a surveyed to 242 teachers at the four middle schools in Brewton County during faculty meetings, on different days as a means of collecting the data. The researcher selected the sample by attending each individual middle school's faculty meeting, and based on teachers' willingness to participate in the study, they were given a survey to complete. Elective teachers were included in the survey because they serve as support teachers for each of the four core subjects, assisting in the direct and indirect instruction of students. These elective teachers also served as individual tutors in the schools as well. Teachers in Brewton County, in terms of age, experience, ethnicity percentages, and certification levels, are reflective of the larger population of teachers in the state as determined by Georgia Professional Standards Commission (GPSC), 2008. The GPSC (2008) found that the average number of teachers in Georgia to be 42.3 years of age, 24.6% of the teachers in Georgia, being the largest percentage, have 0 – 4 years of experience. White teachers make up 74.8% of the approximate 140,000 in the state, while Black and Hispanic make up 23.9% and 1.3% respectively. Additionally, 59% of the teaching workforce have at least a master's degree or higher, while 40.5% have only a bachelor degree or lower.

In comparison, the average number of teachers in Brewton County 41.6 years of age, 27.3% of teachers in Brewton County, being the largest percentage, have 0 – 4 years of experience. White teachers make up 71.1% of the approximate 1,600, in the county, while Black and Hispanic make up 28.2 % and 0.07% respectively. Additionally, 51.2% of the teaching workforce have at least a master degree or higher, while 48.8% have only a bachelor degree or lower (Hayden, 2008).

### **Research Instrumentation**

The survey instrument was developed by the researcher, with items developed in cooperation with university professors, teachers, and administrators. The Teacher Perception Survey had 40 rated items and three demographic items, identifying grade taught, years of teaching experience, and content area taught. Additionally, the response time to complete the survey ranged from 8 - 12 minutes to complete. Participants were not identified when the results were compiled. A Likert scale (4-point) format of rating participants' perceptions has been known be better than other types of attitudinal rating scales (Gall, Gall, & Borg, 2007; Sprinthall, 2003). For this reason, a 4-point Likert scale was used in this study. Participants were asked to select the response that BEST or MOST accurately reflected their beliefs and perceptions. A statement rated as (4) would have indicated that the participant "strongly agree" with statement and a rating of (1) indicates that the participant "strongly disagree" with the statement.

The TPS instrument measured three dimensions of the perceptions middle school teachers had concerning standardized testing data. The overall scale for the TPS instrument had a Cronbach's Alpha of .930. Next, the researcher considered three dimensions or subscales, which measured teachers' "belief" and "use" of standardized

testing data. The final dimension or subscale of the instrument measured leadership practices impact on teachers' ability to use data. The first dimension or subscale of the instrument measured if English/ Language and Mathematics teachers', compared to other content teachers, believed that data was more useful, the Cronbach's Alpha for this subscale was .705. The second dimension or subscale of the instrument compared whether or not English/ Language and Mathematics teachers' used standardized testing data more than other content area teachers, the Cronbach's Alpha for this subscale was .882. Finally, the third dimension or subscale of the instrument measured if existing leadership practices help middle school teachers use standardized test data in instructional planning, the Cronbach's Alpha was .838. See table 1.

Table 1

*Teachers' Perceptions Reliability Coefficients*

Subscales	Items	Reliabilities
Teachers' Belief in Data	9, 10, 11, 22, 24, 27, 34, 40	.930
Teachers' Use of Data	2, 5, 7, 8, 12, 13, 14, 15, 17, 18, 23, 29, 32, 35, 36, 37, 38, 39	.705
Leadership Practices	1, 3, 4, 6, 16, 20, 21, 25, 26, 27, 28, 30, 31	.882



The content of the items was taken from findings from recent studies of a similar nature and repeated in the literature. Surveys completed and returned yielded a return rate of 81%.

### **Pilot Study**

The Teachers' Perception Survey (TPS) was piloted to 10 volunteer participants not part of the main study. The pilot study participants were Board level middle schools support staff. The reviewers were asked to check the questionnaire for consistency, clarity, and content validity. The reviewers completed the questionnaires and informed the researcher about administering time and recommended changes to improve the instrument. The researcher refined the questionnaire based on the recommended changes suggested by the reviewers. Cronbach's Alpha was conducted on the TPS questionnaire and all the factors were determined to be statistically significant .921, which is considered valid for determining the internal consistency of a survey. A second pilot was determined unnecessary by the panel of experts. In addition, the survey method is chosen to provide participants with time to answer the research questions legitimately and to obtain maximum participation rate.

### **Procedures**

The researcher adhered to the following procedures:

- During the spring of 2010, the researcher requested and received approval from Georgia Southern University, Institutional Review Board (IRB) to conduct this study.
- After IRB approval, the researcher mailed the assistant superintendent an informed consent letter.

- Upon approval from the assistant superintendent the researcher mailed each principal of the middle schools an informed consent letter to conduct the study.
- On the day of administering the survey, the consent letter was read to the participants and their consent was obtained on a sign-in form created by the researcher as they receive the survey to be completed.
- Data for the study was collected by the researcher attending the faculty meeting of each of the four individual middle schools. Before administering the survey, the researcher explained purpose of the study as well as the research questions to the participants. The researcher also reassured the participants that confidentiality would be maintained and that they need not put their name or the name of their school on the survey. The participants were told the survey packets contained a formal consent form, survey, and a response card. Teachers were directed to seal their survey and response card in the envelope provided before returning it to the principle investigator.

### **Data Analysis**

Analysis results were reported in the order of three research sub-questions:

Sub-question 1: To what extent do middle-school English/Language Arts and mathematics teachers' believe that standardized test data is useful as compared to other content area teachers?

Sub-question 2: To what extent do middle-school English/Language Arts and mathematics teachers' use standardized test data as compared to other content teachers?

Sub-question 3: To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?

### *Hypothesis*

The statistical analysis of independent-samples t-tests was used to analyze research question 1 and research question 2 because the researcher wanted to know if a statistically significant difference existed between English/Language Arts and mathematics teachers and other content area teachers in terms of their “belief” and their “use” of standardized testing data. To answer that question, the researcher chose independent-samples t tests to determine differences between the means of English/Language Arts and mathematics teachers and other content area teachers. This study had two hypotheses that analyzed if a statistically significant difference existed between English/Language Arts and mathematics teachers and other content area teachers.

*Ho 1:* there is no statistical significance that supports that English/Language Arts and mathematics teachers’, in comparison to other content teachers, belief that standardized test data is more useful.

*Summary:* On average, English/Language Arts and mathematics teachers’ reported slightly higher scores on the teacher belief subscale ( $M = 20.84$ ,  $SE = 0.39$ ), compared to teachers of other subjects ( $M = 20.68$ ,  $SE = 0.35$ ), therefore the hypothesis is not supported.

*Ho 2:* there is no statistical significance that support that English/Language Arts and mathematics teachers’ “use” standardized test data more compared to teachers of other subjects.

*Summary:* On average, English/Language Arts and mathematics teachers' reported slightly higher scores on the teacher use subscale ( $M = 48.43$ ,  $SE = 0.81$ ), compared to teachers of other subjects ( $M = 47.14$ ,  $SE = 0.84$ ), therefore the hypothesis is not supported.

The results were reported as tables and charts. Comparison of the data summarized showing correlations, in the form of percentages and statistical significance. The researcher got the total sample means ( $M$ ) and standard deviations ( $SD$ ) for all items and did a descriptive table ( $M$  and  $SD$ ) per item by each of the sub-groups. To answer sub-question 1, the researcher created a hypothesis and clustered survey items 9, 10, 11, 19, 22, 24, 27, 34, and 40. To answer sub-question 2, the researcher created a hypothesis and clustered survey items 2, 5, 7, 8, 12, 13, 14, 15, 17, 18, 23, 29, 32, 35, 36, 37, 38, and 39. The remaining cluster of questions 1, 3, 4, 6, 16, 20, 21, 25, 26, 27, 28, 30, and 31 will be used to answer sub-question three using descriptive statistics. The researcher will use  $p < .05$ , as the criterion for statistical significance.

This will help reduce Type I error (saying there is a difference, when there is not). During data analysis descriptive statistics were used to manage the data and organize the data into useable information, and it will be used to describe the basic data exactly as presented. The factors involving what English/Language Arts and mathematics middle school teachers do with standardized state criterion testing data as compared with those that teach other subjects will be analyzed using the Statistical Software Package for Social Science program, SPSS as outlined above.

*Ethical Protection of Human Subjects*

Participants had the right to refuse participation or to withdraw at any time with no penalty. Additionally, participants also had the right to inspect, upon request, any instrument or materials related to the research study within a reasonable period of time after the request is received. Only the researcher had access to the information collected in this project, which will be kept in locked storage at the residence of the investigator for a period of three years following the completion of the research.

Participants' names did not appear in any reports of this research. The names of schools, teachers, or school principals were not reported in the final report. No personally identifiable information was reported about participants. No personally identifiable information was released to anyone for any reason without written permission is obtained in advance. All information obtained in this study was strictly confidential unless disclosure was required by law. There were no direct benefits to participants. There were no costs to participants or payments made to participants for participating in this study. Participation in this project was voluntary and involved no unusual risks to participants who may rescind their permission at any time without negative consequences.

### **Summary**

Data use by teachers in schools has proven to be a successful method used to improve the learning in all children. It is believed that the use of data can be used to gauge instructional effectiveness of lessons taught by teachers. With this said, the researcher's purpose of this study is to determine how Georgia middle-school teachers in Brewton County use standardized testing data for instructional purposes. This study added to the body of research on data use by revealing teacher's current perception on state testing results. The study was based on a quantitative approach and was

experimental in type. A 4-point Likert scale was used in this study. Participants were asked to select the response that BEST or MOST accurately reflected their beliefs and perceptions. A statement rated as (4) would have indicated that the participant “strongly agree” with statement and a rating of (1) indicates that the participant “strongly disagree” with the statement. The TPS instrument measured three dimensions of the perceptions middle school teachers had concerning standardized testing data. The overall scale for the TPS instrument had a Cronbach’s Alpha of .930. Next, the researcher considered three dimensions or subscales, those being “Belief,” “Use,” and “leadership practices.” The  $p < .05$  will determine the level of significance of the study results.

## Chapter IV

### **REPORT OF DATA AND DATA ANALYSIS**

#### Introduction

The overarching research question was: What are the perceptions of middle school teachers regarding the use of standardized testing data?

The following sub-questions were examined in this study:

Sub-question 1: To what extent do middle-school English/Language Arts and mathematics teachers' believe that standardized test data is useful as compared to other content area teachers?

Sub-question 2: To what extent do middle-school English/Language Arts and mathematics teachers' use standardized test data as compared to other content teachers?

Sub-question 3: To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?

The study was designed as a quantitative study as the researcher used descriptive statistics data and independent-samples t tests. There were nine items clustered to answer research question one as it pertains to "belief" (subscale 1). Additionally, there were 18 items clustered to answer research question two as it pertains to "use" (subscale 2) and lastly, there were 13 questions clustered to answer research question three as it pertained to leadership practices that facilitate data use in instructional planning (subscale 3). Based on these three questions the researcher discovered the perceptions of Georgia middle school teachers, in Brewton County, as it pertained to the use of standardized testing data.

### Analysis of Demographic Data

A total of 242 teachers from the four middle schools in Brewton County, a small metropolitan school district in Georgia, participated in the study. The teachers were state certified classroom teachers who taught in grades 6<sup>th</sup> – 8<sup>th</sup>. Out of the 297 selected participants, there were a total of 242 who participated in the study yielding a return rate of 81%.

School 1 had 74 out of 81 surveys completed and returned, which yielded a return rate of 91%. School 2 had 66 out of 76 surveys completed and returned, which yielded a return rate of 87%. School 3 had 54 out of 75 surveys completed and returned, which yielded a return rate of 72%. School 4 had 48 out of 65 surveys completed and returned, which yielded a return rate of 74%. The return rates are presented in Table 2.

Table 2

*The Return Rate of Questionnaires by Schools*

School	Distributed	Returned (%)
School 1	74	81 (91%)
School 2	66	76 (87%)
School 3	54	75 (72%)
School 4	48	65 (74%)

Demographic information was collected to determine the subject, grade, and number of years teachers' taught. There were 42 (17.4%) teachers who taught mathematics, 48 (19.8%) who taught English/Language Arts, 45 (18.6%) who taught



science, 59 (24.4%) taught social studies, and there were 48 (19.8%) teachers who were considered other (see Table 3).

Table 3

*Demographic Data on Subject Taught*

Subject Taught	Frequency	Percent
Mathematics	42	17.4
English/Language Arts	48	19.8
Science	45	18.6
Social Studies	59	24.4
Other	48	19.8

The majority of teachers, 74 (30%), taught a combination of grades, 52 (21.5%) taught 8<sup>th</sup> grade, 55 (22.7%) taught 7<sup>th</sup> grade, and 60 (24.8%) taught 6<sup>th</sup> grade (see Table 4).

Table 4

*Demographic Data on Grade Taught*

Grade Taught	Frequency	Percent
8 <sup>th</sup>	52	21.5
7 <sup>th</sup>	55	22.7
6 <sup>th</sup>	60	24.8
Other	74	31.0

The data revealed that the majority, 64, of teachers in the district had 4 – 7 years (26.4%) of experience. The second highest group, for number of years of experience where those who had 8 – 11 years; they totaled 49 (20.2%). The next group was those teachers who had 12 – 15 years of experience, they totaled 48 (19.8%), teachers who had 15 years or more was next with 42 (17.4%). Finally, teachers who had 0 – 3 years of experience, 39 (16.1%) were last (see Table 5).

Table 5

*Demographic Data on Years of Experience*

Years of Experience	Frequency	Percent
0 – 3	39	16.1
4 – 7	64	26.4
8 – 11	49	20.2
12 – 15	48	19.8
15+	42	17.4

Analysis of Research Question One: Belief that Data is Useful

*Research Question 1:* To what extent do middle-school English/Language Arts and mathematics teachers’ “believe” that standardized test data is useful as compared to other content area teachers?

*Hypothesis 1:* There is no statistical significance that supports the idea that middle school English/Language Arts and mathematics teachers’ believe that standardized test data is more useful as compared to other content area teachers?

*Group Statistics Data on “Belief”*

The independent variable (IV) for conducting this hypothesis was type of teacher/subject, the dependent variable (DV) for question 1 was the resulting score for subscale 1. There were English/ Language and Mathematics teachers’ (n = 90) and other subject area teachers (n = 152) that made up a total of 242 teachers. The other subject area teachers average mean score (M = 20.68, SD = 4.36) was a fraction smaller than the English/ Language and Mathematics teachers’ (M = 20.84, SD = 3.71) as shown in Table 6.

Table 6

*Group Statistics Data on “Belief”*

Subject Recorded	N	Mean	SD
English/LA & Math	90	20.84	3.71
Other Subjects	152	20.68	4.36

Independent-Samples t-Test for Belief Data is Useful

Independent-sample t test for “extent middle-school English/Language Arts and mathematics teachers’ “believe” that standardized test data is useful as compared to other content area teachers’ revealed no statistical significance;  $t(240) = .30$ ,  $p = .762$  as depicted in Table 6. Therefore, Null Hypothesis 1 was accepted that there was no significant difference between English/Language Arts and mathematics teachers and all other content area (see table 7).

Table 7

*t Test for Equality of Means for “Belief”*

Variances	Levene’s Test for Equality of Variances		t test for Equality of Means		
	F	Sig.	df	t	Sig. (2-tailed)*
Equal Variances Assumed	3.338	0.069	240	0.304	0.762*

\*Correlation significant at the .05 level (2-tailed).

Observing the mean score of each item on subscale 1 (“Belief”) the researcher determined whether or not these individual groups of teachers “believed” in the use of data and whether all middle school teachers, participating in this study, “believed” in the use of data? The researcher calculated the following individual mean scores for each item from subscale 1 (“Belief”) for English/ Language and Mathematics teachers 2.65, 2.75, 3.16, 2.34, 2.51, 2.97, 2.28, 2.03, and 2.48; the sum of these items was 23.17. After dividing the sum of these items by the total number in the subscale the result was 2.57. The maximum score is a four (strongly agree) and the minimum score is a one (strongly disagree), thus 2.57 is equivalent to 3.0, which means that English/ Language and Mathematics teachers “somewhat disagree” in the “belief” that data is useful. The researcher calculated the following individual mean scores for each item from subscale 1 (“Belief”) for “other content teachers,” 2.61, 2.69, 3.32, 2.36, 2.45, 2.40, 2.81, 1.98, and 2.46; the sum of these items was 23.08. After dividing the sum of these items by the total

number in the subscale the result was 2.57. The maximum mean score is 4 (strongly agree) and the minimum mean score is 1 (strongly disagree), thus 2.57 is equivalent to 3.0, which means that other content teachers, “somewhat disagree” in the “belief” that data is useful. Thus overall the data suggests that all participants in this study did not “believe” in the use of data.

#### Analysis of Research Question Two: Belief that Data is “Useful”

*Research Question 2:* To what extent do middle-school English/Language Arts and mathematics teachers’ “use” standardized test data as compared to other content teachers?

*Hypothesis 2:* There is no statistical significance that supports that middle school English/Language Arts and mathematics teachers’ “use” standardized test data more as compared to other content teachers.

#### Group Statistics for Data is Useful

The independent variable (IV) for conducting this hypothesis was type of teacher/subject, the dependent variable (DV) for question 2 was the resulting score for subscale 2. There were English/ Language and Mathematics teachers’ ( $n = 90$ ) and other subject area teachers ( $n = 152$ ) that made up a total of 242 teachers. The other subject area teachers average mean score ( $M = 47.14$ ,  $SD = 10.34$ ) was a fraction lower than the English/ Language and Mathematics teachers’ ( $M = 48.43$ ,  $SD = 7.68$ ) as shown in Table 8.

Table 8

*Group Statistics Data on “Use”*

Subject Recorded	N	Mean	SD
English/LA & Math	90	48.43	7.68
Other Subjects	152	47.14	10.34

## Independent-Samples t-Test for Belief Data is Useful

Independent-sample t test for “extent middle-school English/Language Arts and mathematics teachers’ “use” standardized test data more as compared to other content area teachers” revealed no statistical significance in difference between English/Language Arts and Mathematics teachers in their use of data as compared to all other content area teachers, as depicted in Table 8. Therefore, Null Hypothesis 2 was accepted that there was no significant difference between English/Language Arts and Mathematics teachers and all other content area teachers (see table 8);  $t(240) = 1.11$ ,  $p = .270$  see table 9.

Table 9

*t Test for Equality of Means for “Use”*

Variances	Levene’s Test for Equality of Variances		t test for Equality of Means		
	F	Sig.	df	t	Sig. (2-tailed)*
Equal Variances Assumed	8.416	0.004	228	1.11	0.270*

\*Correlation significant at the .05 level (2-tailed).

Observing the mean score of each item on subscale 2 (“Use”) the researcher determined whether or not these individual groups of teachers “use” of data and whether all middle school teachers, participating in this study, “used” data? The researcher calculated the following individual mean scores for each item from subscale 2 (“Use”) for English/ Language and Mathematics teachers 2.60, 2.25, 1.52, 1.92, 2.08, 2.45, 2.56, 2.31, 2.26, 2.24, 2.46, 2.40, 2.22, 2.83, 2.62, 2.22, 2.18, and 2.42; the sum of these items was 41.52. After dividing the sum of these items by the total number in the subscale the result was 2.31. The maximum score is a four (strongly agree) and the minimum score is a one (strongly disagree), thus 2.31 is equivalent to 2.0, which means that English/ Language and Mathematics teachers “somewhat disagree” that data is “useful.” The researcher calculated the following individual mean scores for each item from subscale 1 (“Use”) for “other content teachers,” 2.79, 2.21, 1.73, 1.88, 2.06, 2.60, 2.57, 2.45, 2.28, 2.28, 2.57, 2.22, 2.46, 2.87, 2.55, 2.37, 2.46, 2.54; the sum of these items

was 42.89. After dividing the sum of these items by the total number in the subscale the result was 2.38. The maximum mean score is 4 (strongly agree) and the minimum mean score is 1 (strongly disagree), thus 2.38 is equivalent to 2.0, which means that other content teachers, “somewhat disagree” that data is useful. Thus overall the data suggests that all participants in this study believe that data is “useful.”

#### Analysis of Research Question Three: Leadership Practices Improve Data Use

*Research Question 3:* To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?

The survey item, “My principal’s vision, direction, and expectation for using standardized state criterion testing data to improve instruction and achievement are clear and consistently communicated,” more than half (57.0%) of the participants “strongly agree.” Over a quarter of the teachers (32.5%) “Somewhat agree” that their principal’s vision and expectation for using data is clear and consistent. Only a small fraction of the teachers (5.6%), “somewhat disagree” that their principal’s vision and expectation for using data is clear and consistent, and even a smaller fraction (4.9%) “strongly disagree.” See table 10.



Table 10

*My Principal's Vision, Expectation, etc. for Using Data is Clear...*

Rating	Frequency	Percent
Strongly agree	142	57.0
Somewhat agree	81	32.5
Somewhat disagree	14	5.6
Strongly disagree	5	4.9
Total	242	100.0

The survey item, “I observe my principal using standardized criterion state testing data,” less than half of the participants (39.4%) “strongly agree.” Over a quarter of the teachers (37.3%) “somewhat Agreed” that they observe their principal using data. Only a small fraction of the participants (9.6%), “somewhat disagree” that they observe their principal using standardized criterion state testing data, and even a smaller fraction (13.7%) “strongly disagree.” See table 11.

Table 11

*I Observe My Principal Using Standardized Criterion State Testing Data...*

Rating	Frequency	Percent
Strongly agree	98	39.4
Somewhat agree	93	37.3
Somewhat disagree	24	9.6
Strongly disagree	27	13.7
Total	242	100.0

The survey item, “The principal’s primary focus was on building capacity for others to use data,” less than quarter of the participants marked that they (22.5%) “Strongly agree.” Close to half of the participants (43.4%) marked that they “somewhat agree” that the principal’s primary focus was on building capacity for to use data. Only a small number participants (22.1%) marked that “somewhat disagree” that there principal primary focus was on building capacity for data use, and a smaller fraction of participants (12.0%) marked that they “strongly disagree.” See Table 12.

Table 12

*The Principal's Primary Focus was on Building Capacity for Data Use...*

Rating	Frequency	Percent
Strongly agree	56	22.5
Somewhat agree	108	43.4
Somewhat disagree	55	22.1
Strongly disagree	23	12.0
Total	242	100.0

The survey item “When teachers meet formally to discuss data results the principal is often present and engaged.” Just over a quarter of the participants marked that they (31.7%) “strongly agree.” Close to half of the participants (39.8%) marked they “somewhat agree” that when teachers meet formally to discuss results the principal is often present and engaged. Only a small number of participants (18.5%) marked that “somewhat disagree” that there principal was present and engaged when they met, and a smaller fraction of participants (10.0%) marked that they “strongly disagree.” See Table 13.

Table 13

*When Teachers Meet Formally to Discuss Data Results...*

Rating	Frequency	Percent
Strongly agree	79	31.7
Somewhat agree	99	39.8
Somewhat disagree	46	18.5
Strongly disagree	18	10.0
Total	242	100.0

The survey item, “The standardized state criterion tests results I receive is disaggregated by student subgroup.” Just over a quarter of the participants (27.3%) marked that they “strongly agree.” A third of participants (33.3%) marked that they “somewhat agree” that when they receive test results that they disaggregated by student subgroup. A number of participants (21.3%) marked that they “somewhat disagree” that when they receive test results that they disaggregated by student subgroup, and a smaller fraction of participants (10.0%) marked that they “strongly disagree.” See Table 14.

Table 14

*The Standardized State Criterion Tests Results I Receive is Disaggregated...*

Rating	Frequency	Percent
Strongly agree	68	27.3
Somewhat agree	83	33.3
Somewhat disagree	53	21.3
Strongly disagree	38	18.1
Total	242	100.0

The survey item, “There is an expectation in my school that teachers use standardized state criterion testing data to inform their classroom practices,” 93 participants (37.3%) marked that they “strongly agree.” 96 participants (38.6%) marked that they “somewhat agree” that there is an expectation in the school that teachers use testing data in their classroom. 38 participants (15.3%) marked that they “somewhat disagree” that there is an expectation teachers use of data in the classroom, and only 15 participants (8.8%) marked that they “strongly disagree.” See table 14.

Table 15

*There is an Expectation in my School that Teachers Use...*

Rating	Frequency	Percent
Strongly agree	93	37.3
Somewhat agree	96	38.6
Somewhat disagree	38	15.3
Strongly disagree	15	8.80
Total	242	100.0

The survey item, “I have been trained on how to use state standardized state criterion test data,” 68 participants (27.3%) marked that they “strongly agree.” 90 participants (36.1%) marked that they “somewhat agree” that they have been trained on how to use test data. 52 participants (20.9%) marked that they “somewhat disagree” that they have been trained on how to use test data and 32 participants (8.8%) marked that they “strongly disagree.” See table 16.

Table 16

*I have been Trained on how to Use Standardized Test Data...*

Rating	Frequency	Percent
Strongly agree	68	27.3
Somewhat agree	90	36.1
Somewhat disagree	52	20.9
Strongly disagree	32	15.7
Total	242	100.0

The survey item, “My principal provides time for staff to analyze and plan instruction based on standardized state criterion testing results,” 66 participants (26.5%) marked that they “strongly agree.” 109 participants (43.8%) marked that they “somewhat agree” that there principal provided time for them to analyze testing results. 49 participants (19.7%) marked that they “somewhat disagree” that there principal provided time for them to analyze testing results and 18 participants (11.0%) marked that they “strongly disagree.” See table 17.

Table 17

*My Principal Provides Time for Staff to Analyze and Plan Based on Test Results...*

Rating	Frequency	Percent
Strongly agree	66	26.5
Somewhat agree	109	43.8
Somewhat disagree	49	19.7
Strongly disagree	18	11.0
Total	242	100.0

The survey item, “The leadership staff provides encouragement and resources to help me use standardized state criterion testing data,” 51 participants (20.5%) marked that they “strongly agree.” 113 participants (45.4%) marked that they “somewhat agree” that the leadership staff at their school provides encouragement and resources for using data. 53 participants (21.3%) marked that they “somewhat disagree” that the leadership staff provides encouragement and resources for using data and 25 participants (12.8%) marked that they “strongly disagree.” See table 18.



Table 18

The Leadership Staff Provides Encouragement to Help Me Use Test Data...

Rating	Frequency	Percent
Strongly agree	51	20.5
Somewhat agree	113	45.4
Somewhat disagree	53	21.3
Strongly disagree	25	12.8
Total	242	100.0

The survey item, “Standardized state criterion testing data on my current students is easy for me to access,” 63 participants (25.3%) marked that they “strongly agree.” 107 participants (43.0%) marked that they “somewhat agree” that testing data on their current students is easy to access. 50 participants (20.1%) marked that they “somewhat disagree” that testing data on their current students is easy to access and resources for using data and 22 participants (11.6%) marked that they “strongly disagree.” See table 18

Table 19

*Test Data on my Current Students is Easy to Access...*

Rating	Frequency	Percent
Strongly agree	63	25.3
Somewhat agree	107	43.0
Somewhat disagree	50	20.1
Strongly disagree	22	11.6
Total	242	100.0

The survey item, “The principal provided time for teacher to meet regularly to plan and share instructional strategies based on standardized state criterion testing results,” 66 participants (26.5%) marked that they “strongly agree.” 107 participants (43.0%) marked that they “somewhat agree” that their principal provided time for them to meet based standardized testing results. 51 participants (20.5%) marked that they “somewhat disagree” that their principal provided time for them to meet based standardized testing and 18 (12.8%) marked that they “strongly disagree.” See table 20.

Table 20

*The Principal Provided Time for Teachers to Meet Based on the Results of State Test...*

Rating	Frequency	Percent
Strongly agree	66	26.5
Somewhat agree	107	43.0
Somewhat disagree	51	20.5
Strongly disagree	18	12.8
Total	242	100.0

The survey item, “The principal built ownership by making sure teachers understood how to use standardized state criterion testing results to improve instruction was available to teachers,” 37 participants (14.9%) marked that they “strongly agree.” 118 participants (47.4%) marked that they “somewhat agree” that their principal made sure that they understood how to use data to improve their instruction. 61 participants (24.5%) marked that they “somewhat disagree” that their principal made sure that they understood how to use data to improve their instruction and 26 participants (13.2%) marked that they “strongly disagree.” See table 21.

Table 21

*The Principal Built Ownership by Making Sure Teachers Knew How to Use Data...*

Rating	Frequency	Percent
Strongly agree	37	14.9
Somewhat agree	118	47.4
Somewhat disagree	61	24.5
Strongly disagree	26	13.2
Total	242	100.0

The survey item, “Staff development focused on how to analyze standardized state criterion testing results to improve instruction was available to teachers,” 36 participants (14.5%) marked that they “strongly agree.” 107 participants (43.0%) marked that they “somewhat agree” that staff development focused on how to analyze data was available to teachers. 77 participants (30.9%) marked that they “somewhat disagree” that staff development focused on how to analyze data was available to teachers and 22 participants (11.6%) marked that they “strongly disagree.” See table 22.

Table 22

*Staff Development Focused on How to Analyze Standardized State...*

Rating	Frequency	Percent
Strongly agree	36	14.5
Somewhat agree	107	43.0
Somewhat disagree	77	30.9
Strongly disagree	22	11.6
Total	242	100.0

The individual mean scores for each question is reported below. See table 23.

Table 23

*Individual Means and Standard Deviations in Response to...*

Clustered Question	Mean	SD
1	1.51	0.701
3	1.92	0.973
4	2.19	0.899
6	2.01	0.904
16	2.25	1.034
20	1.90	0.884
21	2.20	0.995

Table 23

*Individual Means and Standard Deviations in Response to... (Continued)*


---

25	2.08	0.887
26	2.21	0.894
27	2.13	0.904
28	2.09	0.881
30	2.31	0.860
31	2.35	0.843

---

Observing the mean score of each item on subscale 3 (“Leadership Practices”) the researcher determined whether all middle school teachers, participating in this study, believed that leadership practices by their principal increased their use of standardized testing data?

The researcher calculated the individual mean scores for each item from subscale 3 (“Leadership Practices”) and the sum of these items was 27.15. After dividing the sum of these items by the total number in the subscale the result was 2.08. The maximum mean score is 4 (strongly agree) and the minimum mean score is 1 (strongly disagree), thus 2.08 is equivalent to 2.0, which means that teachers overall “somewhat disagree” believed that leadership practices by their principal increased their use of standardized testing data.

### **Major Findings of the Study**

The findings of this study, with regard to English/ Language and Mathematics teachers' "belief" that standardized criterion testing data was more useful than all other teachers, was not supported and found not to be true. The mean scores for subscale 1 revealed that English/ Language and Mathematics teachers' "somewhat disagree" in the "belief" that data was useful. Also, it was revealed that other content teachers "somewhat disagree" in the "belief" that data was useful.

Additionally, with regard to whether English/ Language and Mathematics teachers' "use" standardized test data more than teachers of other subjects was not supported and found not to be true. The mean scores for subscale 2 revealed, that English/ Language and Mathematics teachers' "somewhat disagree" that they "use" standardized testing data. Also, it was revealed that other content teachers "somewhat disagree" that they "use" standardized testing data.

Last, the researcher calculated the individual mean scores for each item from subscale 3 ("Leadership Practices") and it was revealed that teachers overall "somewhat disagree" that leadership practices by their principal increased their use of standardized testing data.

## CHAPTER V

### **SUMMARY, CONCLUSION, AND IMPLICATIONS**

This chapter provides a brief summary of the study. It includes the analysis and discussion of the findings relevant to related professional literature, implications based on the findings, recommendations for further study based on the analysis of the data gathered during the study, and concluding thoughts.

#### **Summary**

The problem of this study evolved out of the sparse research currently available on the perceptions of data usage by middle school teachers. Through a survey designed to gather information on perceptions of middle school teachers use of data in Brewton County, the researcher of this study was able analyze teachers' perceptions of using data by comparing English/Language Arts and Mathematics teachers against all other content area teachers as the researcher looked at the "beliefs" and "usage" of data by these teachers. Additionally, the researcher also analyzed leadership practices that helped middle school teachers use standardized test data in instructional planning. The researcher developed an instrument (Appendix A) to measure the perceptions teachers had concerning data and the sample included 242 middle school teachers from four different middle schools. The researcher disseminated and collected the survey, to teachers at their respective schools.

#### **Purpose of Study**

The purpose of this study was to investigate the perceptions of Georgia middle school teachers in Brewton County, concerning the use of standardized testing data. The literature and experiences of middle school teachers informed the researcher of relevant



variables for this study, including “belief” in data, “use” of data, and leadership practices that facilitate teachers’ use of standardized testing results in instructional planning.

### **Research Questions**

The following overarching question was considered in this study:

What are the perceptions of Georgia middle school teachers, in Brewton County, regarding the use of standardized state testing data?

The following sub-questions were used to answer the overarching questions:

Sub-question 1: To what extent do middle-school English/Language Arts and mathematics teachers’ believe that standardized test data is useful as compared to other content area teachers?

Sub-question 2: To what extent do middle-school English/Language Arts and mathematics teachers’ use standardized test data as compared to other content teachers?

Sub-question 3: To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?

### **Summary of Major Findings**

The researcher identified the major findings of the study:

#### ***Findings of the study included:***

The major finding in this research study was that English/Language Arts and mathematics teachers’ do not “believe” that standardized test data is more useful as compared to other content area teachers. Actually, English/Language Arts and mathematics teachers’ belief in data was only slightly greater. In a minor finding, it was revealed that teacher’s overall “belief” in data were neither high nor low. But an equal

number of the teachers in this study did “believe” that standardized testing data were useful.

The second major finding was that English/Language Arts and mathematics teachers’ do not “use” standardized test data more than other content area teachers. Specifically, on average, English/Language Arts and mathematics teachers reported using the data slightly one percentage point more than other content teachers. In a minor finding, it was revealed that teachers overall “use” of data were neither high nor low. But an equal amount of the teachers in this study did “use” standardized testing data.

In the final major finding, though approximately 90% of all the participants in the study believed that their principal had a clear vision and expectation for using data, the results of the study revealed that teachers overall “somewhat disagree” that leadership practices by their principal increased their use of standardized testing data.

In the next section, the researcher discussed the findings of this study as they converge and diverge from the literature. The section is organized by research question to include major and minor findings determined by data analysis of responses to items on the instrument designed to measure the perceptions middle school teachers as it pertains to using state standardized criterion testing data.

### **Analysis and Discussion of Research Findings**

The findings of the study were presented in Chapter 4. The purpose of this section is to present a thorough discussion of the major findings from this study in relation to the professional literature. Many of the findings of this study were similar and resembled much of the information cited in the review of literature. The findings were discussed as a series of responses to the research sub-questions.

*Sub-question 1: To what extent do middle school English/Language Arts and Mathematics teachers “believe” that standardized test data is useful as compared to other content area teachers?*

Previous studies concerning standardized test and test results have revealed that teachers are concerned about the utility, validity, and the appropriateness of standardized test results (Dorr-Bremme et al., 1983; Englert et al., 2005). The research also revealed that high-stake tests and the results they produce, in some instances, have constrained teachers’ beliefs and practice. This lack of confidence or belief in standardized test results caused teachers to be pessimistic about what test results reveal, in that, they question whether the results from the state tests are an accurate reflection of what students knew or did not know (Smith et al., 1989; Feldman & Tung, 2001). The literature also showed that teachers believed that there were too many tests and the results were not useful (Paris & Urdan, 2000).

The results from this study converges with previous research, in that, it revealed overall, teachers somewhat disagree in “belief” that standardized test data are useful. The results of the study revealed that teachers were not totally convinced that standardized tests were helpful in monitoring the effectiveness of instructional strategies and in identifying gaps in student’s learning. Also, in this study, in comparing English/Language Arts and mathematics teachers to those who taught other content, the researcher found that English/Language Arts and mathematics teachers “belief” that standardized test data was useful was only a fraction higher than teachers of other content. This was surprising considering Brewton County’s efforts for the last five years to increase the scores of students who have failed Reading/ English/Language Arts and/or mathematics. The effort

to increase the scores of students who have failed these two particular subjects evolved out the county's inability to make Annual Yearly Progress (AYP). The teachers of other content have not endured the constant pressures, from school and district leadership, of ensuring that their students make gains as those who teach English/Language Arts and mathematics.

*Sub-question 2: To what extent do middle-school English/Language Arts and mathematics teachers' use standardized test data as compared to other content teachers?*

The researcher believed that if teachers found that standardized testing results were helpful in terms of increasing learning in students and improving their self efficacy then teachers would "use" the data more often. Herman and Gribbons (2001) discussed that teachers' common complaint concerning the use of standardized test results was that they did not believe in the validity nor the reliability of test data and because of this teachers often did not use them. In this study it was revealed that overall teachers somewhat disagree that standardized testing data was "useful." Practice and experience has taught the researcher that if teachers are not convinced about the effectiveness of new practice (the use of data) then they want "use" it.

Many studies found that teachers were not actively using data to guide planning and instructional decisions (Earl & Katz, 2006; Marsh et al., 2006; Petride & Nodine, 2005). The research also showed that teachers could use data to document and comprehend the impact of their actions, improve their practices, and teachers could use data to monitor progress towards state standards (U. S. Department of Education, 2003). A review of the literature also showed that if teachers felt that standardized test results were useful then they would be able to identify the link between teaching practices and

student performances so that high achievement levels could be gained (Miller, 2000). Additionally, Kerr et al., (2006) found that 81% of the teachers in their study reported that standardized state data was useful for making instructional related decisions. Those results converge with the findings in this study as teachers' use of data was neither high nor low.

This particular finding could be a result of Brewton County's recent start in emphasizing that teachers use data in their daily practice, and with this initiative being in the early stages, the impact has not had enough time to persuade teachers "use" in either direction. It was also revealed in this study, that when comparing English/ Language Arts and Mathematics teachers to teachers of other content, concerning the "use" of data, teachers of other content were using the data only a fraction less than those who taught English/ Language Arts and mathematics. Considering that the State of Georgia has mandated, through the *A-Plus Educational Reform Act of 2000* (as amended in 2003) that all 3<sup>rd</sup>, 5<sup>th</sup> and 8<sup>th</sup> grade students must pass these two subjects on the Georgia Criterion Reference Competency Test (GCRCT) in order to be promoted to the next grade (Georgia Department of Education, 2003), and the fact that all four of Brewton County's middle schools have not made AYP, particularly because of students inability to pass English/ Language Arts and /or mathematics, and the direct pressures from district leaders, this findings came as a surprise.

*Sub-question 3: To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?*

Past studies have shown that principals and teachers are using data significantly more in their work compared to the past (Englert et al., 2003a; Englert et al., 2004b;

Englert et al., 2005c). In an effort to increase the use of standardized testing data principals must have a clear school-wide vision and build a strong culture for data use (Datnow et al., 2007). Supovitz and Klein (2003) revealed in their study that innovated data use came from the person who had the vision and the persistence to turn an idea into action. It was revealed in this study that teachers believed that their principal had a vision, direction and expectation for using data. Additionally, 77% of the participants in this study observed their principal using state testing data to assess the effectiveness of programs and in instructional planning. This in essence, the researcher has learned from practice, sets the tone for the staff in the school to use the data, in that, it must start with the leader first. The participants in this study, approximately 67%, believed that the data was disaggregated such that it could be used immediately. However, approximately 31% of the participants in this study basically disagree that their principal provided time for staff to analyze and plan based on the results of state testing results. The research reveals that in order for teachers to use data effectively they must be given time to immerse themselves in the practice of using standardized testing data (Armstrong & Anthes, 2001; Englert et. al., 2004).

This result does not suggest that every teacher is using data in their perspective schools but it does suggest from a leadership standpoint that the expectation for data use has been established. Additionally, considering that Brewton County has only recently (within a year and a half) begun training administrators on how to use data and training them on how to effectively re-deliver this training to their teachers, the researcher had expected teachers overall opinion concerning whether current practices by their principal help them use standardized test data in instructional planning to be uninfluenced.

## Conclusions

In conclusion, the implementation of standards-based accountability under NCLB has presented opportunities for data use by giving teachers new sources of data for analysis as well as increasing the expectations on them to improve student achievement on test scores (Massell, 2001). The findings in the study correlated with the research sub-questions and were used to answer the overarching question, “What are the perceptions of Georgia middle school teachers, in Brewton County, regarding the use of standardized state testing data?” The findings revealed that teachers in this school district are not totally convinced about the usefulness of standardized testing data.

The findings for the first research sub-question one, To what extent do middle school English/Language Arts and Mathematics teachers “believe” that standardized test data is useful as compared to other content area teachers?, revealed that the majority of teachers somewhat disagreed about the “belief” that standardized test were useful. However teachers have been highly encouraged by school and district leadership to use data in their daily practice, there has been an intended push for teachers of Reading (English/Language Arts) and mathematics to use the data because of the high-stakes involved, as it pertains to 8<sup>th</sup> grade students being retained if they do not pass the state exam (GaCRCT) and the impact this also has on the school district, in that, many politicians and the public at large believe the scores on students’ high-stakes tests are the only way to determine if teachers are doing their job (Bracey, 2001). Surprisingly, the researcher found that teachers of all content basically “believed,” equally that standardized testing data was important.

The findings for research sub-question two, To what extent do middle-school English/Language Arts and mathematics teachers' "use" standardized test data as compared to other content teachers?, revealed that all teachers in Brewton County are using standardized testing data, but surprisingly, English/Language Arts and mathematics teachers' are using data slightly more compared to other content teachers. Brewton County leadership has invested many resources into ensuring that English/Language Arts and mathematics teachers', have the professional development required to fully implement Georgia's new curriculum. The state's new curriculum was rolled out incrementally, starting with English/Language Arts and mathematics. Teachers had to attend several training outside of the county as it pertained to teaching this curriculum correctly. There also have been several follow-up trainings that have taken place inside of the county that allowed teachers, English/Language Arts and mathematics teachers specifically, time to practice and demonstrate their new learning, and get feedback from coaches on how to correct problems in teaching the new curriculum as these problems arrived. However, despite these efforts 42% of the participants did not agree that staff development focused on how to analyze standardized state testing results were available to teachers. Additionally, 38% of the participants believe that principals did not make sure that they knew how to use data to improve instruction, and only 25% believe they had time provided to use data.

Findings from this study addressed research sub-question three, To what extent do existing leadership practices help middle school teachers use standardized test data in instructional planning?, indicated that participants in this study somewhat disagreed that current practices by their principals facilitated there use of state test data in their



instructional planning. In this study it was revealed that approximately 90% of all the participants in the study believed that their principal had a clear vision and expectation for using data. Additionally, the majority agreed (77%) that they witnessed their principal using standardized testing data and 66% believed that the leadership staff had provided encouragement to help them use test data. However, having a vision and expectation for data use and actually using the data, is only one aspect of being an effective data driven leader. Principals also have to identify a particular method of data use that is most effective for their school and be able to document quantitatively, how this method is contributing to the improvement in teacher's ability to use data and more importantly, how this method is improving the learning of children in their school.

In closing, standardized testing data play a salient role in federal and state accountability policies. Test data are also important sources of information to guide improvement at all levels of educational systems and to hold teachers, and others involved in the education of children, accountable. The research revealed that teachers "belief" and "use" of test data was important in their daily instructional activities to help children. Additionally, teachers confirmed that current principal practices at their particular school helped to increase their ability utilize data. Through analysis and synthesis of the findings, the researcher drew the following conclusions:

- Teachers in the county are using data more compared to teachers of the past; however, they are still as skeptical about the usefulness of standardized tests as teachers of the past were before NCLB (2001).
- Teachers did not fully grasp what particular method they were using to disaggregate data and Brewton County has not led an effort to train teachers on

what the literature has revealed as effective models for disaggregating and analyzing data.

- In order for teachers to become comfortable with data and be able to use it effectively, leadership in the county must provide blocks of time, consistently, through out the school day, for teachers to work together to analyze standardized test data.
- Brewton County needs to do more to show teachers that using standardized testing data is an effective strategy in improving their practice and in helping teachers improve student achievement.

### **Implications**

The purpose of using standardized testing data is to connect student performance outcomes to classroom practice. As a result of the *No Child Left Behind Act of 2001*, a school, a district, and a state's test results will be used to determine whether they are fulfilling the mandates of this law.

The implications of this study relates to the perception of teachers who utilize standardized testing data in their practice. Overall teachers did not find data to be beneficial and viewed it in a negative light. However, there needs to be more training provided to assist teachers in fully understanding the benefits of using standardized testing data in their practice.

The findings of this study contribute to the body of existing literature on teachers' use of standardized test results. There are not many current studies on teachers' perspectives concerning the use of testing data in Georgia, and there is limited research found from other states about teachers' understanding concerning the use of state

achievement results. This study revealed that teachers viewed standardized testing data negatively and it revealed that teachers believed that current administrative practices basically did not contribute to them using standardized tests in their daily practice. These findings contribute to principal's role as instructional leaders to promote continuous school improvement and into fulfilling the mandates of NCLB (2001).

This study will also benefit district leadership in Brewton County. In this era of accountability it is important that school leaders in Brewton County look beyond NCLB (2001) requirements to move student data into the hands of teachers and technology that enhances, and not encumber, teachers' ability to disaggregate and analyze data. This is important as school leaders look to influence teachers to change their instruction, to monitor student performance, and to evaluate the effectiveness of school programs and policies.

### **Recommendations for Further Study**

The following recommendations are results of the research findings and provide an agenda for further research.

1. Conduct a study to determine what barriers, myths, or conditions exist in schools that encumber data use by teachers and school administrators.
2. Conduct a study to determine how teachers and parents expectation and experiences with data influence principal's leadership behavior.
3. This study should be replicated and administered to all Georgia public elementary, middle, and high school teachers, ensuring that individuals who taught more than one subject are required to indicate whether one of the additional subjects they taught was either English/Language Arts or mathematics.

4. Further research should be conducted into which particular leadership actions by principals that teachers have found to be more effective in increasing their use of standardized test data.
5. This study should be replicated in states other than Georgia to compare the perceptions of other teachers and what factors have, in terms of using data, been most helpful in producing the greatest gains in student achievement.

### **Concluding Thoughts**

This study investigated the perceptions of Georgia middle school teachers,' in Brewton County, concerning the use of standardized testing data. The analysis of the data indicated that there was a slight difference in the "belief" of standardized testing data when comparing other content teachers to English/ Language and Mathematics teachers'. Additionally, analysis of the data indicated that there was not a significant difference in the "use" of standardized testing data when comparing other content teachers to English/ Language and Mathematics teachers'. Lastly, the teachers in this study agreed that the existing leadership practices by their principal neither help nor hinder them in using standardized test data in instructional planning. Overall, the researcher has concluded that the perceptions of Georgia middle school teachers, in Brewton County, to be slightly negative as it pertains to use of standardized testing data.

The demands on educators to improve student learning is increasing each day. Understanding teachers' perception on using standardized testing data is a means that school leaders can use to reduce encumbrances to student learning. The researcher has a personal connection to this study and a passion for learning more about this topic. Daily, leaders of this profession must address the problem of why some students are not

learning, at the expected level, or why some teachers are able to increase the learning of children and why other teachers cannot, what can be done about it. It is the expectation that this study can provide some insight into this problem.

## References

- Abbott, D. V. (2008). A functionality framework for educational organizations: Achieving accountability at scale. In E. Mandinach & M. Honey (Eds.), *Data driven school improvement: Linking data and learning* (pp. 257 – 276). New York: Teachers College Press.
- Airasian, P.W. (1987). “State Mandated Testing and Educational Reform: Context and Consequences.” *American Journal of Education*.
- Airasian, P.W. & Madaus, G.F. (1983). “Linking Testing and Instruction: Policy Issues.” *Journal of Educational Measurement*, 20(2).
- Allington, R. (2000). How to improve high-stakes test scores without really improving. *Issues in Education*, 6(1/2), 115-125.
- Amrein, A.L. (2002). Time-series analysis of the intended and unintended consequences of high-stakes tests. *Dissertation Abstracts International*, 63(04), 1312. (UMI No. 3045633).
- Amrein, A.L. & Berliner, D.C. (2002). High-stakes testing, uncertainty, and student learning *Education Policy Analysis*, Retrieved from <http://www.epaa.asu.edu/v10n18/>
- Amrein, A., & Berliner, D. (2003). The testing divide: New research on the intended and unintended impact of high-stakes testing. *Peer Review*, 5(2), 31 – 32.
- Armstrong, J., & Anthes, K. (2001). How data can help. *American School Board Journal* 188(11), 38–41.
- Babbie, E. (2001). *Survey research methods* (9th ed.). Belemont, CA: Wadsworth.
- Barnes, R. B., Moriarty, K., & Murphy, J. (1982). Reporting testing results: The missing

- key in most testing programs. *NASSP Bulletin*, 66(457), pp.14 – 20.
- Bernhardt, V. L. (2003a). No Schools Left Behind. *Educational Leadership* 60(5), 26-30.
- Bernhardt, V. L. (2000b). Intersections. *Journal of Staff Development*, 21(1), 33-36.
- Bernhardt, V. L. (1998c). *Data Analysis for Comprehensive School-wide Improvement*.  
Larchmont, NY: Eye on Education.
- Bigger, S. L. (2006). Data-driven decision-making within a professional learning community: Assessing the predictive qualities of curriculum-based measurements to a high-stakes, state test of reading achievement at the elementary level. Unpublished doctoral dissertation, University of Pennsylvania, Philadelphia, PA.
- Blachowicz, C. L. Z., Buhle, R., Frost, S, & Bates, A. (2007). Formative uses of assessment: Cases from the primary grades. In J. Paratore & R. McCormack (Eds.), *Classroom literacy assessment* (pp. 246–261). New York: Guilford.
- Boudett, K. P., City, E. A., & Murnane, R. J. (Eds.). (2005). *Data wise: A step-by-step guide to using assessment results to improve teaching and learning*.  
Cambridge, MA: Harvard Education Press.
- Bracey, G. W. (2001). Test scores in the long run: Not important. *Phi Delta Kappan*, 82, 637-638.
- Bracey, G. W. (2003). April Foolishness: The 20<sup>th</sup> Anniversary of A Nation at Risk. *Phi Delta Kappan*, 84, 701 – 702.
- Brooks, J. B., & Brooks, M. G. (1993). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Brown, R. G. (1993). *Schools of Thought How the Politics of Literacy Shape Thinking in*

*the Classroom*. San Francisco, CA: Jossey Bass

Brunner, C., Fasca, C., Heinze, J., Honey, M., Light, D., Mandinach, e., et al. (2005).

Linking data and learning: The Grow Network study. *Journal of Education for Students Placed at Risk*, 10(3), 241-267.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental design for research*. Chicago, IL: Rand McNally.

Center on Education Policy. (2004). *From the capital to the classroom: Year 2 of the No Child Left Behind Act*, Washington, DC: Author.

Celio, M. B., & Harvey, J. (2005) *Buried Treasure: Developing an Effective management Guide from Mountains of Educational Data*. Seattle, Wash: Center on Reinventing Public Education.

Chen, E., Heritage, M., & Lee, J., 2005. "Identifying and Monitoring Students' Learning Needs with Technology." *Journal of Education for Students Placed at Risk* 10(3): 309-32.

Choppin, J. (2002, May). *Data use in practice: Examples from the school level*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

Chrisman, V. (2005). How schools sustain success. *Educational Leadership*, 62(5), 16–20.

Cizek, G. J. (2001). More unintended consequences of high-stakes testing. *Educational Measurement: Issues and Practice*, 20(4), 19 – 27

Clarke, M., Shore, A., Rhoades, K., Abrams, L., Miao, J., & Li, J. (2003). *Perceived effects of state-mandated testing programs on teaching and learning: Findings*



*from interviews with educators in low-, medium-, and high-stakes states.*

Retrieved from <http://www.bc.edu/research/nbetpp/statements/nbr2.pdf>

Copeland, M. A. (2003). Leadership of inquiry: Building and sustaining capacity for school improvement. *Educational Evaluation and Policy Analysis*, 25, 375–395.

Council of the Great City Schools (2001), *Beating the Odds II: A City-by-City Analysis of Student Performance and Achievement Gaps on State Assessments – Spring 2001 Results*, Washington, D. C., 2002

Cremin, L.A. (1964). The progressive heritage of the guidance movement. In F. Landy & L. Perry (Eds.), *Guidance in American education: Background and prospects* (pp. 11-19). Cambridge, MA: Harvard University Graduate School of Education.

Cremin, L. (1964) *Transformation of the School: Progressivism in American Education, 1876 -1957*. New York: Random House.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods Approaches* (2nd ed. ). Lincoln, NE: Sage.

Cromey, A., & Hanson, M. (2000). *An exploratory analysis of school-based student assessment systems*. Oak Brook, IL: North Central Regional Educational Laboratory (NCREL).

Cross, K. P. (1987). The adventures of education in wonderland: Implementing education reform, *Phi Delta Kappan*, 68, 496 – 502

Danielson, C. (1996). *Enhancing professional practice: A framework for teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.

Darling-Hammond, L. (2000). *Teacher quality and student achievement: A review of*

- state policy evidence. *Education Policy Analysis Archives*, 8(1). Retrieved from <http://epaa.asu.edu/epaa/v8n1>.
- Darling-Hammond, L., & Wise, A. E. (1985). Beyond standardization: State standards and school improvement. *Elementary School Journal*, 85, 315 – 336.
- Datnow, A., Park, V., & Wohlstetter, P. (2007). Achieving with data: How high performing elementary school systems use data to improve instruction for elementary school students. Center of Educational Governance. Rossier School of Education. University of Southern California.
- Dembosky, J. W., Pane, J. F., Barney, H., & Christina, R. (2005). Data driven decisionmaking in Southwestern Pennsylvania school districts. Working paper. Santa Monica, CA: RAND.
- Deming, W. E. (1986). *Out of crisis*. Cambridge, MA: MIT Center for Advanced Engineering Study.
- Detert, J. R., Kopel, M. E. B., Mauriel, J. J. & Jenni, R. W., (2000). “Quality Management in U. S. High Schools: Evidence from the Field,” *Journal of School Leadership*, 10, 158 – 187.
- Dorr-Bremme, D. & Herman, J. (1983). Use of testing in schools: A national profile. In W. Hathaway (Ed.), *Testing in the schools: New directions for testing and measurement* pp 3 – 17, San Francisco, CA: Jossey Bass.
- Driesler, S. D. (2001). Whiplash from backlash? The truth about public support for testing. NCME Newsletter, 9(3), 3-5.
- Duke, D. (n.d.). *Keys to sustaining successful school turnaround*. Unpublished manuscript. Charlottesville, VA: Darden\Curry Partnership for Leaders in

Education. Retrieved from

[http://www.darden.virginia.edu/web/uploadedFiles/Darden/Darden\\_Curry\\_PLE/UVASchoolTurnaround/KeystoSuccess.pdf](http://www.darden.virginia.edu/web/uploadedFiles/Darden/Darden_Curry_PLE/UVASchoolTurnaround/KeystoSuccess.pdf)

- Dynarski, M. (2008). Researchers and educators: Allies in Learning. *Educational Leadership: Data, Now What?* 66(4), 48–53
- Earl, L., & Katz, S. (2002). Leading schools in a data-rich world. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration* (pp. 1003 – 1022). Upper Saddle River, NJ: Prentice-Hall.
- Englert, K., Fries, D., Martin-Glenn, M., & Michael, S. (2005). *How are educators using data? A comparative analysis of superintendent, principal, and teachers' perceptions of accountability systems*. Aurora, CO: Midcontinent Research for Education and Learning.
- Englert, K., Fries, D., Martin-Glenn, M., & Michael, S. (2004). *How are principals using data? A comparative analysis of principal perceptions of accountability systems*. Aurora, CO: Midcontinent Research for Education and Learning.
- Englert, K., Fries, D., Martin-Glenn, M., & Michael, S. (2003). *How are teachers using data? A comparative analysis of teachers' perceptions of accountability systems*. Aurora, CO: Midcontinent Research for Education and Learning.
- Evaluation Section, Division of Accountability Services, North Carolina Department of Public Instruction. 2000. Closing the Achievement Gap: *Views from Nine Schools*. Retrieved from [www.eric.ed.gov/PDFS/ED459302.pdf](http://www.eric.ed.gov/PDFS/ED459302.pdf)

- Feldman, J., & Tung, R. (2001). *Whole school reform: How schools use the data-based inquiry and decision making process*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Fennessey, D. (1982). Primary teachers' assessment practices: Some implications for teacher training. Paper presented at the annual conference of the South Pacific Association for Teacher Education, Frankston, Victoria, Australia.
- Fiarman, S. E. (2007). Planning to assess progress: Mason Elementary School refines an instructional strategy. In K. P. Boudett & J. L. Steele (Eds.), *Data wise in action: Stories of schools using data to improve teaching and learning* (pp. 125-148). Cambridge, MA: Harvard Education Press.
- Flowers, N., & H. Carpenter, D. (2009). You don't have to be a statistician to use data: A process for data-based decision making in schools. *Phi Delta Kappan*, 91(2), 64 – 67.
- Mathews, C. V. F. (2002). Principals and data-driven decision making (Virginia). Unpublished doctoral dissertation, University of Virginia
- Forman, M.L. (2007). Developing an action plan: Two Rivers Public charter School focuses on instruction. In K. P. Boudett & J. L. Steele (Eds.), *Data wise in action: Stories of schools using data to improve teaching and learning* (pp. 107-124). Cambridge, MA: Harvard Education Press.
- Fowler, F. J. (2002). *Survey research methods*. (3rd ed.). Thousand Oaks, CA: Sage.
- Gabler, J. (1987). How do you score on testing? *The School Administrator*, 44(11), 6.
- Gall, M.D., Gall, J. P. & Borg, W. R. (2007). *Educational Research: an introduction* (8<sup>th</sup> ed.) Boston, Mass: Allyn & Bacon

Gay, L. R. & Airasian, P. (2000). *Educational research: Competencies for analysis and application* (6th ed.) Upper Saddle River, NJ: Prentice-Hall

Georgia Department of Education. (2010). Georgia Performance Standards: Georgia Criterion Reference Competency Test Requirements, Implementation Resource. Atlanta, GA: Georgia Department of Education School Improvement Services.

Georgia Department of Education. (2002, August). *Implementing No Child Left Behind*.

Retrieved from

[http://public.doe.k12.ga.us/tss\\_school\\_improve.aspx?PageReq=TSSSchoolImpModernRed](http://public.doe.k12.ga.us/tss_school_improve.aspx?PageReq=TSSSchoolImpModernRed)

Glatthorn, A. (1999). Curriculum alignment revisited. *Journal of Curriculum and Supervision* 15(1), 26-34.

Goslin, D. A. (1967). *Teachers and testing*. New York: The Russell Sage Foundation

Green, K. E., & Williams, E. J. (1989, March). Standardized test use by classroom teachers: Effects of training and grade level taught. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco.

Gullickson, A. R. & Hopkins, K. D. (1987). The context of educational measurement instruction for pre-service teachers: Professor perspectives. *Educational Measurement: Issues Practice*, 6, 12 – 16.

Guskey, T. (2003). How classroom assessments improve learning. *Educational Leadership* 60(5), 6-11.

Haladyna, T., Haas, N., & Allison, J. (1998). "Continuing tensions in standardized testing." *Childhood education: Annual theme*, 1998. 262-273

- Hallinger, P., & Heck, R. H. (2002). What do you call people with visions? The role of vision, mission, and goals in school leadership and improvement. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration* (pp. 9-40). The Netherlands: Kluwer.
- Halverson, R., & Thomas, C. N. (2007). The roles and practices of student services staff as data-driven instructional leaders. In M. Mangin & S. Stoelinga (Eds.), *Instructional teachers leadership roles: Using research to inform and reform* (pp. 163 – 200). New York: Teachers College Press.
- Hamilton, L. (2003). Assessment as a policy tool. *Review of Research in Education*, 27, 25 – 68.
- Hamilton, L. S., & Koretz, D. M. (2002). Tests and their use in test-based accountability systems. In L. S. Hamilton, B. M. Stecher, & S. P. Klein (Eds.), *Making sense of test-based accountability in education* (pp. 13 – 49). Santa Monica, CA: RAND.
- Hayden, L. (2008, August 10). Communique [Electronic mailing list message]. Retrieved from <http://www.newtoncountyschools.org/board/meetings.asp>
- Heibert, J., Stigler, J. W., Jacobs, J.K., Givvin, K.B., Garnier, H., Smith, M.(2005) Mathematics teaching in the United States today (and tomorrow): results from the TIMSS 1999 video study, *Educational Evaluation and Policy Analysis*, 27(4),. 111-132.
- Henning, J. E. (2006). Teacher leaders at work: Analyzing standardized achievement data to improve instruction. *Education*, 126, 729-737.
- Heritage, M. & Chen, E. ( 2005 ). Why data skills matter in school improvement. *Phi Delta Kappan*, 86, 707-710.

- Herman, J.L., & Gribbons, B. (2001). *Lessons learned in using data to support school inquiry and continuous improvement: Final report to the Stuart Foundation* (CSE Tech. Rep. No. 535). Los Angeles: University of California, Center for the Study of Evaluation.
- Hess, F. (2009). The new stupid. *Educational Leadership*, 66(4), 12–17.
- Heubert, J. P., & Hauser, R. M. (Eds.) (1999). *High stakes: Testing for tracking, promotion, and graduation*. Washington, DC: National Academy Press.
- Hoover, H.D., Dunbar, S.B., Frisbee, D.A., Oberley, K.R., Bray, G.B., Naylor, R.J., et al. (2003). *The Iowa Tests: Interpretive guide for teachers and counselors*. Ithaca, IL: Riverside.
- Huffman, D., & Kalnin, J. (2003). Collaborative inquiry to make data-based decisions in schools. *Teaching and Teacher Education*, 19, 569-580.
- Hoyle, J. R., English, F. W., & Sheffy, B. E. (1985). Skills for successful school leaders. Arlington, VA: American Association of school administrators
- Immerwahr, J. and Johnson, J. (1996) Incomplete Assignment, America's Views on Standards: An Assessment by Public Agenda, *The Progress of Education Reform*
- Ingram, D. Louis, K.S., Schroeder, R. 2004. Accountability policies and teacher decision making: barriers to the use of data to improve practice. *Teachers College Record* 106 (6): 1258-87.
- Johnson, J.F., and Asera, R. (Eds.). (1999). *Hope for urban education: a study of nine high-performing, high-poverty, urban elementary schools*. Washington, DC: Policy Studies Associates and The University of Texas at Austin, The Charles A.

Dana Center.

Johnson, R. (2002). *Using data to close the achievement gap: How to measure equity in our schools* (1<sup>st</sup> ed.). Thousand Oaks, CA: Corwin.

Jones, G., Jones, B. D., Hardin, B., Chapman, L., Yarbrough, T., & Davis, M. (1999).

The impact of high-stakes testing on teachers and students in North Carolina. *Phi Delta Kappan*, 81, 199 – 203.

Juran, J. M. (1988). *On planning for quality*, New York: Free Press.

Kerr, K. A., Marsh, J. A., Ikemoto, G. S., Darilek, H., & Barney H., (2006). Strategies to promote data use for instructional improvement: Actions, outcomes, and lessons from three urban districts. *American Journal of Education*, 112, 496-520.

Killion, J., & Bellamy, G. T. (2000). On the job: Data analysts focus school improvement efforts. *Journal of Staff Development*, 21(1), 27-31.

Lachat, M.A. (2002). *Data-driven high school reform: The breaking ranks model*. Hampton, NH: Center for Resource Management.

Latham, G. P., & Locke, E. A. (2006). Enhancing the benefits and overcoming the pitfalls

Lazar-Morison, C., Polin, L., Moy, R., & Burry, J. (1980). A review of the literature on test use. Los Angeles: Center for the Study of Evaluation, California State University

Liddle, K. (2000). Data-driven success: how one elementary school mined assessment data to improve instruction. *American School Board Journal*. Retrieved from <http://www.asbj.com/MainMenuCategory//Archieve.aspx>.

Linn, R. L. (2000). Assessments and accountability. *Educational Researcher*, 29(2), 4–16.



- Madaus, G. F. (1985). Test scores as administrative mechanisms in educational policy. *Phi Delta Kappan*, 66, 611-617
- Marion, S. F., & Sheinker, A. (1999). *Issues and consequences for state-level minimum competency testing programs* (Wyoming Report 1). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.
- Marsh, J. A., Pane, J. F., & Hamilton, L. S. (2006). *Making sense of data-driven decision making in education*. Santa Monica, CA: RAND Corporation. Retrieved from [http://www.rand.org/pubs/occasional\\_papers/OP170/](http://www.rand.org/pubs/occasional_papers/OP170/)
- Marzano, R. J. (2003) *What Works in Schools: Translating Research into Action*. Alexandria, VA: Association for Supervision and Curriculum Development
- Mapping America's Educational Progress. (2008). Retrieved from <http://www.ed.gov/nclb/accountability/results/progress/nation.html>
- Mason, S. (2002). *Turning data into knowledge: Lessons from six Milwaukee public schools*. Madison: Wisconsin Center for Education Research.
- Massell, D. (2001). The theory and practice of using data to build capacity: State and local strategies and their effects. In S. H. Fuhrman (Ed.), *From the capitol to the classroom: Standards-based reform in the states*. Chicago: University of Chicago Press.
- Mathews, C. V. F. (2002). Principals and data-driven decision making (Virginia). Unpublished doctoral dissertation, University of Virginia
- McKnight, C. C., Crosswhite, F. J., Dossey, J. A., Kifer, E., Swafford, J. O., Travers, K. J., & Cooney, T. J. (1987). *The underachieving curriculum: assessing U.S. school Mathematics from an international perspective*. Champaign, Il.: Stipes.

- McTighe, J., O'Connor, K., (2005). Seven practices for effective learning. *Educational Leadership*, 63 (3) 10-17.
- Mieles, T., and Foley, E. (2005). *From Data to Decisions; Lessons from School Districts Using Data Warehousing*, Providence, R. I.: Annenberg Institute for school Reform at Brown University, 2005.
- Miller, A. C. (2000). "School Reform in Action." Paper presented to the American Educational Research Association Conference, New Orleans.
- Mort, P. R., & Gats, A. I. (1923). *Acceptable uses of achievement tests*. New York: Columbia University,
- Muijs, D., & Reynolds, D. (2001). *Effective teaching: Evidence and practice*. London: Paul Chapman.
- National Education Association (1979) Parents and Testing. Washington, D.C.: National Education Association.
- National Commission on Excellence in Education. (1983). *A Nation at Risk*. Washington, DC: Author.
- National Governors Association (1989). *Results in education: 1989*. Washington, DC: The Governors 1991 Report on Education.
- Nichols, S., & Berliner, D. (2005). *The inevitable corruption of indicators and educators through high-stakes testing*. Arizona State University: Education Policy Studies Laboratory. Retrieved from [http://greatlakescenter.org/docs/early\\_research/g\\_1\\_new\\_doc/EPsL-0503-101-EPRU.pdf](http://greatlakescenter.org/docs/early_research/g_1_new_doc/EPsL-0503-101-EPRU.pdf)
- Nichols, S. L., Glass, G., & Berliner, D. (2005) *High-stakes testing and student*

- achievement: Problems for the No Child Left Behind Act*. Retrieved from <http://epaa.asu.edu/ojs/article/view/72>
- No Child Left Behind Act. (2001). Accessed at <http://www.ed.gov/policy/elsec/leg/esea02/107-110.pdf>.
- Noyce, P., Perda, D., & Traver, R. (2000). Creating data-driven schools. *Educational Leadership*, 57(5), pp. 52 – 56.
- Nye, B., Konstantanopoulos, S., & Hedges, L.V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 26, 237 – 257.
- Paris, S.G., & Urdan, T. (2000). Policies and practices of high-stakes testing that Influence teachers an dschools. *Issues in Education* 6(1/2), 83 – 108
- Parsons, B. A. (2003). A tale of two schools' data. *Educational Leadership*, 60(5), pp. 66-68
- Pedulla, J. J., Abrams, L. M., Madaus, G. F., Russell, M. K., Ramos, M. A., & Miao, J. (2003). Perceived effects of state-mandated programs on teaching and learning: Findings from a national survey of teachers. Boston: National Board on Educational Testing and Public Policy.
- Perrone, V. (1991), ACEI position paper on standardized testing. *Association for Childhood Educational International*. Retrieved from [http://wik.ed.uiuc.edu/index.php?title=Testing%2C\\_standardized&printable=yes](http://wik.ed.uiuc.edu/index.php?title=Testing%2C_standardized&printable=yes)
- Petrides, L., & Nodine, T., (2005). *Anatomy of school system improvement: Performance-driven practices in urban school district*. San Francisco: NewSchools Venture Fund.
- Popham, J. W. (1999). Where large scale educational assessment is heading

and why it shouldn't. *Educational Measurement: Issues and Practice*, 18(3), 13-17.

Popham, J. W., (1987). The merits of measurement-driven instruction. *Phi Delta Kappan*, 68(3), 679-682.

Popham, J. (2003). *Test better, teach better: The instructional role of assessment*. Alexandria, VA: Association for Supervision and Curriculum Development.

Phelps, R. (1996). Are U.S. students the most heavily tested on earth? *Educational Measurement: Issues and Practice*, 15(3), 19-27.

Robinson, V. M. J. & Timperley, H. S. (2007). The leadership of the improvement of teaching and learning: Lessons from initiatives with positive outcomes for students. *Australian Journal of Education*, 51, 247–262.

Resnick, D. P., & Resnick, L. B. (1985). Standards, curriculum, and performance: A historical and comparative perspective. *Educational Researcher*, 14(4), 5-20.

Reynolds, C. R. & Kamphaus, R. W. (2003). *Handbook of Psychological and Educational Assessment of Children: Introduction to The Use of Standardized Tests*. Yonkers, NY: Ramsey

Ronka, D., Lachat, M. A., Slaughter, R., and Meltzer, J. "Answering The Questions That Count." *Educational Leadership* 66, no. 4 (December/January 2008): 18 – 24.

Rothman, R. (2000). *Bringing All Students to High Standards: Report on National Education Goals Panel Field Hearings*. Washington, DC: National Education Goals Panel

Ruddell, R. B. (1985). Knowledge and attitudes toward testing: Field educators and legislators, *Reading Teacher*, 38, 538 – 543.

- Rudman, H. C. (1987). "Classroom Instruction and Tests: What Do We Really Know About the Link?" *NASSP Bulletin*, 71(496), pp. 24 - 31
- Ruch, G. M. and Terman, L. M. (1926). *Stanford Achievement Test manual of directions*. Yonkers-on-Hudson, NY: World Book Company.
- Salmon-Cox, L. (1981). Teachers and standardized achievement tests: What's really happening? *Phi Delta Kappan*, 62(10), pp. 730-736.
- Sanders, W. (1999). Value-added assessment. *The School Administrator*, 55(1), 24–32
- Schafer, R. J. (1971). Retrospect and prospect. *In the curriculum: Retrospect and prospect. Seventieth yearbook of the National Society for the Study of Education, Part I* (pp. 3–25) Chicago: University of Chicago Press.
- Schalock, D., Fielding, G., Schalock, M., Erickson, J., & Scott, M. (1985). Intergrating teaching and testing with program management. *Educational Leadership*, 43(2), 55-59
- Schmoker, M. (2004). "Tipping point: From feckless reform to substantive instructional improvement," *Phi Delta Kappan*, 85, 424-432.
- Schmoker, M. (2006). *Results Now: How We Can Achieve Unprecedented Improvements in Teaching and Learning*. Association for Supervision and Curriculum Development.
- Schmoker, M and Wilson, R. B. (1995). "Results: The Key to Renewal," *Educational Leadership*, 51(1), 64 – 65.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Slavin, R. E. (2002a). Evidence-based education policies: Transforming educational

- practice and research. *Educational Researcher*, 31(7), 15-21.
- Slavin, R. E. (2003b). A reader's guide to scientifically based research. *Educational Leadership*, 60(5), 12-16.
- Smith, M. L., & Fey, P. (2000). Validity and accountability in high-stakes testing. *Journal of Teacher Education*, 51, 334 – 344
- Snipes, J. Doolittle, F., and Herlihy, C., *Foundations for Success: Case Studies of How Urban Schools Improve Student Achievement*, New York: MDRC, 2002
- Snow-Renner, R. (2001). *Teachers' perspectives on standards-based education: initial findings from a high-performing, high-needs school district*. Aurora, CO: Mid-Continent Research for Education and Learning.
- Sprinthall, R. (2003). *Basic Statistical Analysis (7<sup>th</sup> ed.)* Boston, Mass: Allyn and Bacon
- Stecher, B. M., and L. S. Hamilton,(2006). Using Test-Score Data in the Classroom, WR-375-EDU, Santa Monica, Calif.: RAND Corporation. Retrieved from [http://www.rand.org/pubs/working\\_papers/WR375/](http://www.rand.org/pubs/working_papers/WR375/).
- Stecher, B. M., & Chun, T. (2001). School and classroom practices during two years of education reform in Washington state (CSE Tech. Rep. No. 550). Los Angeles: University of California, Los Angeles, Center for Research on Evaluation, Standards, and Student Testing.
- Stez, F. P., & Beck, M. D. (1979). Comments from the classroom: Teachers' and students' opinions of achievement tests. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco.
- Strahan, D., Carlone, H., Horn, S., Dallas, F., & Ware, A. (2003). Beating the odds at Archer elementary school: Developing a shared stance toward learning. *Journal*

*of Curriculum & Supervision*, 18(3), 204.

Supovitz, J. A., & Klein, V. (2003). *Mapping a course for improved student learning: how innovative schools systematically use student performance data to guide improvement*. Report of the Consortium for Policy Research in Education, Philadelphia.

Symonds, K. W. (2003). *After the test: How schools are using data to close the achievement gap*. San Francisco: Bay Area School Reform Collaborative.

Terman, L. M. (1923). *Intelligence tests and school reorganization*. Yonkers-on-Hudson, New York, NY: World Book Company.

The Information Edge: Using data to accelerate achievement (2006). *Education Week*, 25(35).

Tileston, D. W. (2009) *Closing The Poverty and Cultural Gap: Strategies to Reach Every Student*. Dallas, TX: Corwin Press

Torrence, V.D. (2002). *Principals' use of data: A national perspective*. (Doctoral Dissertation, Virginia Polytechnic Institute, 2002). Retrieved from <http://scholar.lib.vt.edu/theses/available/etd-04202002-124945/unrestricted/DissertationVer10.pdf>.

Travers, K., & Westbury, I. (1989). *The IEA study of mathematics I: Analysis of Mathematics curricula*. New York: Pergamon.

Tucker, M. (1995). On occupational clusters: Early thoughts on organizing the work of The National Skill Standards Board. Rochester, NY: National Center on education and the Economy.

U. S. Department of Education (2008). County by county demographics and

specifications. Retrieved from <http://nces.ed.gov/ccd/schoolsearch/>

Viadero, D., (2004). "Achievement Gap Study Emphasizes Better Use of Data"

*Education Week*, 23(19), p. 11

Wayman, J. C., & Cho, V. (2008). Preparing educators to effectively use student data systems. In T. J. Kowalski & T. I. Lasley (Eds.), *Handbook on data-based decision-making in education* (pp. 89 – 104). New York: Routledge.

Wayman, J. C., & Stringfield, S. (2006). Technology-supported involvement of entire faculties in examination of student data for instructional improvement.

*American Journal of Education*, 112, 549–571.

Wayman, J. C., Midgley, S., & Stringfield, S. (2005). "Collaborative Teams to Support Data Based Decision Making and Instructional Improvement," paper presented at the 2005 Annual Meeting of the American Educational Research Association, Montreal, Canada.

Wayman, J. C., Midgley, S., & Stringfield, S. (2007). Leadership for data-based decision-making: Collaborative data teams. In A. B. Danzig, K. M. Borman, B. A. Jones, & W. F. Wright (Eds.), *Learner centered leadership: Research, policy, and practice* (pp. 189-206). Mahwah, NJ: Erlbaum.

Wheelock, A (1992). *Crossing the Tracks*. New York: The New Press

Wigdor, A. K. & Garner, W. R. (1982). *Ability testing: Uses, consequences, and controversies, vol. 1*, National Research Council (u. s.). Committee on ability testing. Washington, DC: National Academy Press.

Williams, B., Williams, P., & Williams, D. (1998) "Assessment and Classroom Learning," *Assessment in Education: Principles, Policy, and Practice*,



5(1), 7 – 74.

Wills, J.L. (1994). *Skill standards in the U.S. and abroad*, (four volumes).

Washington, DC: Institute for Education Leadership.

Wohlstetter, P., Datnow, A., & Park, V. (2008) Creating a system for data-driven decision making; applying the principal-agent framework. *School Effectiveness and School Improvement*, 19, 239 – 259.

## APPENDICES

**APPENDIX A:**

**TEACHER PERCEPTION SURVEY**

## **Teachers' Perception Survey on how they use standardized state criterion reference tests**

### **DIRECTIONS FOR COMPLETING THE SURVEY**

Please do not write on the survey. For the 2009 – 2010 school year, complete the demographic information below. On the Scantron Sheet in the section that reads “STUDENT ID NUMBER” starting with the first column, you will write “H” and then bubble in the appropriate corresponding number. In the second column, under the same section, you will write “I” and bubble in the appropriate corresponding number. Lastly, in the third column, you will write “J” and bubble in the appropriate corresponding number.

If you teach math and science, or math and social studies, under “column I” in the “STUDENT ID NUMBER” section, please code that you teach math. If you teach Language Arts and science, or Language Arts and social studies, under “column I” please code in the “STUDENT ID NUMBER” section that you teach Language Arts. On the Scantron Sheet **DO NOT WRITE YOUR NAME OR THE NAME OF YOUR SCHOOL**

### **DEMOGRAPHIC INFORMATION**

1. Under **column H**, mark the grade you teach this year.

**0** for Grade 6    **1** for Grade 7    **2** for Grade 8

**3** taught combination of all or any two or any three

2. Under **column I**, mark the subject you teach this year.

**0** for Language Arts    **1** for Mathematics    **2** for Science    **3** for Social Studies    **4** other

3. Under **column J**, mark the number of years you have taught as indicated

**0**(0 – 3 years)    **1** (4 – 7 years)    **2**(8 – 11 years)    **3**(12 – 15 years)    **4**(15 years +)

**Note:** For this survey, when you see “Standardized State Criterion Test” this refers to any middle school test mandated by the State of Georgia (e.g., Georgia Criterion Reference Competency Test, 8<sup>th</sup> Grade Writing Exam, ACCESS Test). Also “Standardized State Criterion Test Results” or “Standardized State Criterion Data” refers to the scores received after the students have completed any state mandated test.

Before you start answering the questions on the survey, please know that **1 = A, 2 = B, 3 = C** and **4 = D**. Also, as you complete this survey please think about how you incorporate testing results throughout the school year (beginning, during, and at the end).

Using the Scantron Sheet, rank your response to each of the 40 questions based on a 4-point Likert Scale. When you are finished, place the Scantron Sheet and survey back in the envelope provided. Seal and return the envelope to the primary researcher. Thank you for your willingness to participate in this study.

**ALL RESPONSES SHOULD BE APPROPRIATE TO THE 2009-2010 SCHOOL YEAR.**

\* The term *principal* refers only to the school principal and not the assistant principal(s).

Strategy	S T R O N G L Y	D I S A G R E E	S O M E W H A T	D I S A G R E E	S O M E W H A T	A G R E E	S T R O N G L Y	A G R E E
1. My principal's vision, direction, and expectation for using standardized state criterion testing data to improve instruction and achievement are clear and consistently communicated.	1		2		3		4	
2. The standardized state criterion testing data is a reflection on whether or not I have taught the material	1		2		3		4	
3. I observed the principal using standardized state criterion tests results data to analyze the effectiveness of programs and instruction for future planning.	1		2		3		4	
4. The principal's primary focus was on building others capacity to use standardized state criterion tests results.	1		2		3		4	
5. To what extent do you think analyzing standardized state criterion testing data helps you identify correct differences in achievement between subgroups (e.g., gender, race, migrant status)	1		2		3		4	
6. When teachers meet formally to discuss results of standardized state criterion tests the principal is often present and actively engaged.	1		2		3		4	
7. I applied a variety of instructional strategies to support the learning needs of students based on the standardized state criterion testing results to improve instruction.	1		2		3		4	
8. I know how to disaggregate and analyze standardized state criterion testing results to identify gaps in student's learning.	1		2		3		4	
9. Standardized state criterion testing results helped you monitor the effectiveness of instructional strategies.	1		2		3		4	

10. Standardized state criterion testing results were effective in identifying gaps in student's learning.	1	2	3	4
11. I believe my classroom assessments were more effective in identifying what students knew and did not know than standardized state criterion testing results.	1	2	3	4
12. I met on my own with other teachers to plan and collaborate on how to improve instruction based on the results from standardized state criterion tests.	1	2	3	4
13. I always use standardized state criterion testing results to monitor the progress of my students.	1	2	3	4
14. I always disaggregated standardized state criterion testing results to monitor the progress of particular groups of students.	1	2	3	4
15. Disaggregating standardized state criterion testing results helps me identify and correct differences in achievement between subgroups of students in your classroom.	1	2	3	4
16. The standardized state criterion tests results I receive is disaggregated by student subgroup (e.g. gender, race, bubble students, special education).	1	2	3	4
17. The way I receive standardized state criterion testing results from my principal is useful immediately in my instructional planning.	1	2	3	4
18. I use standardized state criterion testing data to inform my work as a teacher in articulating school improvement goals across grades.	1	2	3	4
19. I feel that standardized state criterion tests data contributes to the overall success of my classroom.	1	2	3	4
20. There is an expectation in my school that teachers use standardized state criterion testing data to inform their classroom practices.	1	2	3	4
21. I have been trained on how to use state standardized state criterion test data.	1	2	3	4
22. Standardized state criterion tests are an effective way to measure student knowledge.	1	2	3	4

23. I regularly use standardized state criterion testing data to plan instruction for my students.	1	2	3	4
24. Standardized state criterion tests provides valid data on teaching and learning in the classroom.	1	2	3	4
25. My principal provides time for staff to analyze and plan instruction based on standardized state criterion testing results.	1	2	3	4
26. The leadership staff provides encouragement and resources to help me use standardized state criterion testing data.	1	2	3	4
27. Standardized state criterion testing data on my current students is easy for me to access.	1	2	3	4
28. The principal provided time for teachers to meet regularly to plan and share instructional strategies based on standardized state criterion testing results.	1	2	3	4
29. I know how to link the results from standardized state criterion testing to appropriate intervention strategies to improve instruction.	1	2	3	4
30. The principal built ownership by making sure teachers understood how to use standardized state criterion testing results to improve instruction.	1	2	3	4
31. Staff development focused on how to analyze standardized state criterion testing results to improve instruction was available to teachers.	1	2	3	4
32. I use standardized state criterion testing results to determine the instructional needs of my class	1	2	3	4
33. I compare the most recent standardized state criterion testing results to past standardized state criterion testing results	1	2	3	4
34. Standardized state criterion testing results are the most important part of your lesson planning.	1	2	3	4
35. The way you teach your students is based mostly standardized state criterion testing results.	1	2	3	4
36. I use standardized state criterion testing results to focus instructional tasks on higher-ordered thinking	1	2	3	4
37. I use standardized state criterion testing results to identify instructional strengths and weaknesses	1	2	3	4

38. I use standardized state criterion testing results to make curriculum decisions.	1	2	3	4
39. I use standardized state criterion testing results to choose instructional materials.	1	2	3	4
40. I believe that monitoring standardized state criterion testing results contributes to the overall success of my class?	1	2	3	4



**APPENDIX B:****INSTITUTIONAL REVIEW BOARD APPROVAL LETTER**

Georgia Southern University Office of Research Services & Sponsored Programs <b>Institutional Review Board (IRB)</b>		
Phone: 912-478-0843	Veazey Hall 2021 P.O. Box 8005 Statesboro, GA 30460	
Fax: 912-478-0719	IRB@GeorgiaSouthern.edu	

**To:** Darrell LaMar Stephens  
2312 Prime Point  
Conyers, GA 30013

**cc:** Charles E. Patterson  
Associate Vice President for Research

**From:** Office of Research Services and Sponsored Programs  
Administrative Support Office for Research Oversight Committees  
(IACUC/IBC/IRB)

**Date:** March 24, 2010

**Subject:** Status of Application for Approval to Utilize Human Subjects in Research

---

After a review of your proposed research project numbered: **H10303**, and titled "**To What Extent Do Georgia Middle School Teachers Use Standardized Testing Data**", it appears that your research involves activities that do not require approval by the Institutional Review Board according to federal guidelines.

According to the Code of Federal Regulations Title 45 Part 46, your research protocol is determined to be exempt under the following exemption category(s):

- ☐ Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (I) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (II) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

*Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that your research is exempt from IRB approval. **You may proceed with the proposed research.***

Sincerely,

Eleanor Haynes  
Compliance Officer

**APPENDIX C:****PILOT STUDY INSTRUCTIONS**

Instructions for Pilot Study

PERCETIONS OF MIDDLE SCHOOL TEACHERS REGARDING THE USE OF  
STANDARDIZED TESTING

by Darrell LaMar Stephens

**I. Read the cover letter for clarity and understanding.**

- Was anything left out that needs to be added?
- Is there anything that needs to be explained that was not?
- Is there anything that needs to be removed?

**II. Read the directions for each section of the survey instrument.**

- Were there any directions that were not clear?
- Is there anything that needs to be added, changed or removed?

**III. Complete the instrument.**

- How long did it take you to complete the survey?
- Did anything confuse you – wording, meaning, etc.?
- Does anything need to be changed?

**IV. Return your completed survey and all comments.**

- Return your completed survey and comments to the researcher.